

ENTRANCE EXAMINATION FOR ADMISSION, MAY 2013.

Ph.D. (BANKING TECHNOLOGY)

COURSE CODE : 146

Register Number :

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*Signature of the Invigilator  
(with date)*

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COURSE CODE : 146

Time : 2 Hours

Max : 400 Marks

*Instructions to Candidates :*

1. Write your Register Number within the box provided on the top of this page and fill in the page 1 of the answer sheet using pen.
2. Do not write your name anywhere in this booklet or answer sheet. Violation of this entails disqualification.
3. Read each question carefully and shade the relevant answer (A) or (B) or (C) or (D) in the relevant box of the ANSWER SHEET using HB pencil.
4. Avoid blind guessing. A wrong answer will fetch you -1 mark and the correct answer will fetch 4 marks.
5. Do not write anything in the question paper. Use the white sheets attached at the end for rough works.
6. Do not open the question paper until the start signal is given.
7. Do not attempt to answer after stop signal is given. Any such attempt will disqualify your candidature.
8. On stop signal, keep the question paper and the answer sheet on your table and wait for the invigilator to collect them.
9. Use of Calculators, Tables, etc. are prohibited.

The question paper has two sections. Students belonging to M.Tech./M.Sc.(CS/IT)/M.C.A. streams are requested to attempt questions in Section I (Q.1 to Q.100). The Section - II (Q.101 - Q.200) is for students with M.B.A./M.Com. degree.

MENTION THE SECTION ON THE TOP OF THE OMR SHEET.

**Section I - IT STREAM**

1. A term associated with the comparison of processing speeds of different computer system is:  
(A) EFTS (B) MPG  
(C) MIPS (D) CFPS
2. Which of the following medical activity was made possible by computers?  
(A) X Ray (B) Brain scan  
(C) Open Heart Surgery (D) Vaccination
3. Which of the following required large computer memory?  
(A) Imaging (B) Graphics  
(C) Voice (D) All of above
4. Plotter accuracy is measured in terms of repeatability and  
(A) Resolution (B) Vertical dimensions  
(C) Buffer size (D) Intelligence
5. Enterprise Java Beans is an example of  
(A) Message Oriented Middleware (B) Object Oriented Middleware  
(C) Process Oriented Middleware (D) None of the above
6. Steganalysis is related to  
(A) Hiding Information (B) Watermarking  
(C) Crypting Information (D) None of the above

7. Bio-Authentication is based on
- (A) What you know (B) What you are  
(C) What you have (D) None of the above
8. Which of the following circuit is used as a 'Memory device' in computers?
- (A) Rectifier (B) Comparator  
(C) Flip-Flop (D) None of the above
9. Which of the following is (are) true about virtual memory systems that use pages?
- I. The virtual address space can be larger than the amount of physical memory.  
II. Programs must be resident in main memory throughout their execution.  
III. Pages correspond to semantic characteristics of the program.
- (A) I only (B) II only  
(C) I and II (D) I and III
10. What are software interrupts?
- (A) RST 0 - 7 (B) RST 5.5 - 7.5  
(C) INTR, TRAP (D) None of the above
11. By default word documents print in \_\_\_\_\_ mode
- (A) Landscape (B) Portrait  
(C) Print View (D) Page
12. Which of the following packages is used for composition in a printing press?
- (A) Word (B) Word Pad  
(C) Page Maker (D) Photoshop
13. Which view in Power Point can be used to add notes to the slides?
- (A) Normal (B) Slide Show  
(C) Slide Sorter (D) None of the above

14. Which of the following is not a spreadsheet application?

- (A) Excel
- (B) Lotus 1-2-3
- (C) VisiCalc
- (D) Lotus Notes

15. Consider the following function.

```
double p(double b, unsigned int e)
```

```
{  
    if (e == 0)  
        return 1.0;  
    else  
        if (even(e))  
            return p(b*b, e/2);  
        else  
            return p(b*b, e/2)*b;  
}
```

How many multiplications are executed as a result of the call p(5.0, 12)?

- (A) 6
  - (B) 8
  - (C) 9
  - (D) 12
16. Which of the following statements about a remote procedure call is true?
- (A) It can not return a value
  - (B) It can not pass parameters by reference
  - (C) It can not call procedures implemented in different languages
  - (D) None of the above
17. Consider the program given in the question 24 and find the output of procedure zzz if call-by-reference parameter-passing method is used.
- (A) 2, 7
  - (B) 2, 9
  - (C) 9, 14
  - (D) None of the above

18. Which of the following is a true statement?
- (A) Data characteristics are dynamic
  - (B) A data model explains the transient form of an organization
  - (C) Data flow paths are permanent
  - (D) None of the above
19. Gathering the information you need for data modeling by reviewing specific business documents handled within the system describes the
- (A) top-down approach
  - (B) bottom-up approach
  - (C) investigative approach
  - (D) None of the above
20. On an entity-relationship diagram, a diamond represents a(n):
- (A) data flow
  - (B) entity
  - (C) multivalued attribute
  - (D) relationship
21. An audit trail
- (A) is used to make back-up copies
  - (B) is the recorded history of operations performed on a file
  - (C) can be used to restore lost information
  - (D) all of the above
22. Which of the following file organization is most efficient for a file with a high degree of file activity?
- (A) Sequential
  - (B) VSAM
  - (C) ISAM
  - (D) B-Tree Organization
23. A data dictionary doesn't provide information about
- (A) where data is located
  - (B) how the data is used.
  - (C) who owns or is responsible for the data
  - (D) the size of the disk storage device

24. The arranging of data in a logical sequence is called
- (A) Sorting (B) Classifying  
(C) Reproducing (D) Summarizing
25. Which of the following statements about Ethernets is typically FALSE?
- (A) Ethernets use circuit switching to send messages.  
(B) Ethernets use buses with multiple masters.  
(C) Ethernet protocols use a collision-detection method to ensure that messages are transmitted properly.  
(D) Networks connected by Ethernets are limited in length to a few hundred meters.
26. Which of the following statements about datagrams sent by a node in a network using IPv4 protocol is (are) true?
- I. Datagrams at the source must be the size of the smallest maximum transmission unit (MTU) of all the links on a path to the destination.  
II. Datagrams may be fragmented during routing.  
III. Datagrams are reassembled only at the destination.
- (A) I only (B) II only  
(C) II and III only (D) I, II and III only
27. \_\_\_\_\_ is used to sniff confidential data from users.
- (A) Spamming (B) Phishing  
(C) Hacking (D) All of the above
28. Which does not come under feasibility analysis?
- (A) Environmental Feasibility (B) Economic Feasibility  
(C) Technical Feasibility (D) None of the above
29. Suppose that a certain software product has a mean time between failures of 10,000 hours and has a mean time to repair of 20 hours. If the product is used by 100 customers, what is its availability?
- (A) 80% (B) 98%  
(C) 99.8% (D) 100%



37. Dequeue is a
- (A) Double Ended Queue
  - (B) Double Edged Queue
  - (C) Double Entry Queue
  - (D) None of the above
38. The complexity of bubble sort algorithm is
- (A)  $O(n)$
  - (B)  $O(\log n)$
  - (C)  $O(n \log n)$
  - (D)  $O(n^2)$
39. Which of the following data structure is a nonlinear data structure?
- (A) Tree
  - (B) Linked lists
  - (C) Graph
  - (D) All of above
40. The output quality of a printer is measured by
- (A) Dot per inch
  - (B) Dot per sq. Inch
  - (C) Dots printed per unit time
  - (D) All of above
41. Who invented the high level language C?
- (A) Dennis M. Ritchie
  - (B) Niklaus Writh
  - (C) Seymour Papert
  - (D) Donald Kunth
42. The key F12 opens a
- (A) Save As dialog box
  - (B) Open dialog box
  - (C) Save dialog box
  - (D) Close dialog box
43. What is gutter margin?
- (A) Margin that is added to the left margin when printing
  - (B) Margin that is added to right margin when printing
  - (C) Margin that is added to the binding side of page when printing
  - (D) Margin that is added to the outside of the page when printing



44. Replace the page that will not be used for the longest period of time. This principle is adopted by
- (A) FIFO Page replacement algorithm
  - (B) Optimal Page replacement algorithm
  - (C) Round robin scheduling algorithm
  - (D) SCAN scheduling algorithm
45. A process that is based on IPC mechanism which executes on different systems and can communicate with other processes using message based communication is called
- (A) Remote Procedure Call
  - (B) Local Procedure Call
  - (C) Inter Process Communication
  - (D) Remote Machine Invocation
46. Which of the following statements in regard to Directories is false?
- (A) Directories can exist inside directories
  - (B) The root directory is always at the highest level
  - (C) Directories with files can be deleted
  - (D) Directories cannot be renamed
47. In immediate addressing the operand is placed
- (A) in the CPU register
  - (B) after OP code in the instruction
  - (C) in memory
  - (D) in stack
48. Which of the following registers is used to keep track of address of the memory location where the next instruction is located?
- (A) Memory Address Register
  - (B) Memory Data Register
  - (C) Instruction Register
  - (D) Program Register
49. Pipelining strategy is called implement
- (A) instruction execution
  - (B) instruction prefetch
  - (C) instruction decoding
  - (D) instruction manipulation
50. Which of the following data structures are indexed structures?
- (A) linear arrays
  - (B) linked lists
  - (C) Stack
  - (D) Queue

51. Binary search algorithm cannot be applied to
- (A) sorted linked array (B) sorted binary trees  
(C) sorted linear list (D) pointer array
52. The memory address of fifth element of an array can be calculated by the formula
- (A)  $LOC(\text{Array}[5]) = \text{Base}(\text{Array}) + w(5 - \text{lower bound})$ , where  $w$  is the number of words per memory cell for the array  
(B)  $LOC(\text{Array}[5]) = \text{Base}(\text{Array}[5]) + (5 - \text{lower bound})$ , where  $w$  is the number of words per memory cell for the array  
(C)  $LOC(\text{Array}[5]) = \text{Base}(\text{Array}[4]) + (5 - \text{Upper bound})$ , where  $w$  is the number of words per memory cell for the array  
(D) None of above
53. Which of the following data structure is not linear data structure?
- (A) Arrays (B) Linked lists  
(C) Both of the above (D) None of the above
54. The two basic types of record access methods are
- (A) direct and immediate (B) sequential and random  
(C) sequential and indexed (D) on-line and real-time
55. Codes which don't require frequently updation and promote user efficiency due to
- (A) Simplicity (B) Sortability  
(C) Stability (D) Expansibility
56. Identify the invalid pointer arithmetic
- (A) Assigning the value 0 to a pointer variable  
(B) Comparison of pointers that do not point to the element of the same array  
(C) Subtracting an integer from a pointer  
(D) Addition of float value to a pointer

57. In a relational schema, each tuple is divided into fields called
- (A) Relations
  - (B) Domains
  - (C) Queries
  - (D) All of the above
58. Which of the following is not true about indexes?
- (A) Indexes are created to enforce uniqueness on columns.
  - (B) Indexes are created to enable fast retrieval by column values.
  - (C) Columns that are frequently used with equal conditions in WHERE clauses are good candidates for indexes.
  - (D) Indexes are created with the ALTER TABLE command.
59. Which of the following is not true about modifying table columns?
- (A) You can drop a column at any time.
  - (B) You can add a column at any time as long as it is a NULL column.
  - (C) You can increase the number of characters in character columns or the number of digits in numeric columns
  - (D) You cannot increase or decrease the number of decimal places.
60. Which of the following statements is incorrect?
- (A) The difference between synchronous and asynchronous transmission is the clocking derived from the data in synchronous transmission.
  - (B) Half-duplex line is a communication line in which data can move in two directions, but not at the same time.
  - (C) Batch processing is the preferred processing mode for telecommunication operations.
  - (D) Teleprocessing combines telecommunications and DP techniques in online activities.
61. A single packet on a data link is known as
- (A) Path
  - (B) Frame
  - (C) Block
  - (D) Group

62. "Roll-up" is an OLAP operation
- (A) Which switches from the details to the aggregate level within a classification hierarchy
  - (B) Which switches from the details to the aggregate level among many dimensions
  - (C) Which switches from the aggregate to the detail level within a classification hierarchy
  - (D) Which switches from the details to the aggregate levels across many classification hierarchies
63. A "Virtual warehouse" is essentially
- (A) A traditional relational database providing a multidimensional view through a middleware and it is different from the enterprise's operational database
  - (B) It is the operational database but provides warehouse facilities through a middleware
  - (C) It is the materialized view of the operational and transactional database
  - (D) Both (A) and (B)
64. The content of Datawarehouse is said to be "non-volatile", because
- (A) It remains the same even after the system crashes
  - (B) Its life-span is very long
  - (C) It is a read-only data
  - (D) It disappears when the system is switched off
65. Snowflake Schema is
- (A) a set of tables comprised of a single, central fact table surrounded by de-normalized dimensions.
  - (B) implement dimensional data structures with de-normalized dimensions
  - (C) a set of tables comprised of a single, central fact table surrounded by normalized dimension hierarchies
  - (D) None of the above
66. What is ETL Stand for?
- (A) Execute transmit and load
  - (B) Extract transform and load
  - (C) Execute Transform and load
  - (D) All the above

67. Masquerade is
- (A) An attack in which an entity takes on the identity of a different entity without authorization
  - (B) Information that causes a cipher to encrypt or decrypt
  - (C) Computer software designed to infiltrate or damage a computer system
  - (D) A device controls undesirable network traffic
68. Man-in-the-middle
- (A) An attack in which an entity takes on the identity of a different entity without authorization
  - (B) An attack against public key exchange in which the attacker substitutes his own public key for the requested public key
  - (C) An attack in which data is observed but not modified
  - (D) None of the above
69. If there is an NP-complete language  $L$  whose complement is in NP, then the complement of any language in NP is in
- (A) P
  - (B) NP
  - (C) Both (A) and (B)
  - (D) None of these
70. The logic of pumping lemma is a good example of
- (A) the pigeon-hole principle
  - (B) the divide-and-conquer technique
  - (C) recursion
  - (D) iteration
71. A language is denoted by a regular expression  $L = (x)^*(x \mid yx)$ . Which of the following is not a legal string within  $L$ ?
- (A)  $yx$
  - (B)  $xyx$
  - (C)  $x$
  - (D)  $xyxyx$
72. Which of the following statement is false
- (A) The Halting problem of Turing machines is undecidable
  - (B) Determining whether a context-free grammar is ambiguous is undecidable
  - (C) Given two arbitrary context-free grammars  $G_1$  and  $G_2$  it is undecidable whether  $L(G_1) = L(G_2)$
  - (D) Given two regular grammars  $G_1$  and  $G_2$  it is undecidable whether  $L(G_1) = L(G_2)$

73. The decimal value 0.25
- (A) is equivalent to the binary value 0.1
  - (B) is equivalent to the binary value 0.01
  - (C) is equivalent to the binary value 0.00111
  - (D) cannot be represented precisely in binary
74. What is the minimum number of two-input NAND gates used to perform the function of two input OR gate?
- (A) one
  - (B) two
  - (C) three
  - (D) four
75. When an inverter is placed between both inputs of an SR flip-flop, then resulting flip-flop is
- (A) JK flip-flop
  - (B) D flip-flop
  - (C) T flip-flop
  - (D) Master Slave JK flip-flop
76. Which of the following memories has the shortest access time?
- (A) Cache memory
  - (B) Magnetic bubble
  - (C) Magnetic core memory
  - (D) RAM
77. What is the correct sequence of time delays that happen during a data transfer from a disk to memory?
- (A) seek time, access time, transfer time
  - (B) seek time, latency time, transfer time
  - (C) latency time, seek time, transfer time
  - (D) latency time, access time, transfer time
78. The Schmitt trigger may be used to
- (A) change voltage to corresponding frequency
  - (B) change frequency to voltage
  - (C) square slowly varying input
  - (D) none of these

79. Which of the following binary numbers are not divisible by 4?  
(A) 10101010101010 (B) 1110001110001  
(C) 1111000011 (D) all of these
80. Which of the following enables peripherals to pass a signal down the bus to the next device on the bus during polling of the device?  
(A) DMA (B) Interrupt vectoring  
(C) Daisy chain (D) Cycle stealing
81. In 8085 microprocessor system, the direct addressing instruction is  
(A) MOV A,B (B) MOV B, OAH  
(C) MOV C,M (D) STA adder
82. An instruction used to set the carry flag in a computer can be classified as  
(A) data transfer (B) process control  
(C) logical (D) program control
83. The TRAP is one of the interrupts available in INTEL 8085. Which one of the following statement is true of TRAP?  
(A) It is level triggered  
(B) It is negative edge triggered  
(C) It is the +ve edge triggered  
(D) It is both +ve and -ve edges triggered
84. RAID configurations of disks are used to provide  
(A) fault-tolerance (B) high speed  
(C) high data density (D) none of these
85. Template classes that have already been written to perform common class tasks are called  
(A) container classes (B) receptacle classes  
(C) repository classes (D) alembic classes
86. Virtual function should be defined in \_\_\_\_\_ section of a class  
(A) private (B) public (C) protected (D) anywhere

87. The most efficient data set organization is
- (A) a sequential file
  - (B) an ISAM file
  - (C) variable depending upon the usage of the data set
  - (D) a partitioned data set
88. An incremental backup
- (A) uses more tapes
  - (B) should be done each month
  - (C) saves only files that have recently changed
  - (D) saves all files
89. Trojan-Horse programs
- (A) are legitimate programs that allow unauthorized access
  - (B) are hacker programs that do not show up on the system
  - (C) really do not usually work
  - (D) usually are immediately discovered
90. Which of the following is true of the Data Manipulation Language?
- (A) It refers to data using physical addresses
  - (B) It cannot interface with high-level programming language
  - (C) It is used to define the physical characteristics of each record
  - (D) None of these
91. The relational model uses some unfamiliar terminology. A tuple is a equivalent to
- (A) record
  - (B) field
  - (C) network
  - (D) chain
92. Data integrity control
- (A) is used to set upper and lower limits on numeric data
  - (B) requires the use of passwords to prohibit unauthorized access to the file
  - (C) has the data dictionary to keep the data and time of last access, last back-up, and most recent modification for all files
  - (D) none of these



93. FDDI is a
- (A) Ring Network (B) Star Network  
(C) Mesh Network (D) Bus-based Network
94. In OSI network architecture, the dialogue control and token management are responsibilities of
- (A) Session layer (B) Network layer  
(C) Transport layer (D) Data-link layer
95. Decryption and encryption of data are the responsibility of which of the following layer?
- (A) Physical (B) Data-link (C) Presentation (D) Session
96. A public-key encryption system
- (A) allows anyone to decode the transmissions  
(B) allows only the correct sender to decode the data  
(C) allows only the correct receiver to decode the data  
(D) does not encode the data before transmitting it
97. Which of the following operation is possible with total branch automation?
- (A) Any Where Banking (B) EFT  
(C) Internet Banking (D) Day End Process
98. Total branch automation do not have the following technology feature
- (A) RAID Backup (B) Transaction Level Security  
(C) Financial Middleware (D) All of the above
99. Data replication server in remote place is created for the purpose of
- (A) Data Mirroring (B) Disaster Recovery  
(C) Data Storage (D) None of the above
100. \_\_\_\_\_ are channels of CBS.
- (A) ATM (B) Tele banking  
(C) SMS banking (D) All of the above

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**Section II - FINANCE STREAM**

101. Which one of the following is not a decisional role?  
(A) Disturbance Handler (B) Negotiator  
(C) Figure head (D) Resource allocator
102. Whistle-blowing refers to  
(A) Disclosure of one's unethical behaviour  
(B) An employee who discloses illegal / unethical conduct of others  
(C) An employee who blows the whistle during work  
(D) None of the above
103. Devils's advocate refers to  
(A) A group member whose role is to challenge the majority position  
(B) An advocate who fights the case for hard core criminals  
(C) A person who criticizes every thing  
(D) A person who criticizes everyone in the organization
104. Which one of the following is not part of Maslow's need theory  
(A) Esteem (B) Safety (C) Emotions (D) Belongingness
105. Which of the following is an example of MBO objective?  
(A) Decrease payroll costs by 6% (B) Increase quality significantly  
(C) Process orders quickly (D) Improve customer service
106. To be influential, leaders must  
(A) exercise power  
(B) engage in organizational politics  
(C) accomplish results without using power  
(D) occupy a position of power
107. The specific concerns of total quality management (TQM) include a number of aspects. Which is not normally associated with TQM?  
(A) Inclusion of every person in the organization  
(B) Meeting the needs and expectations of customers  
(C) Primarily a "worker" rather than a management activity  
(D) Covering all parts of the organization

108. What is the acronym PMA refers to?
- (A) Performance Management Activity
  - (B) Performance Management Allowance
  - (C) Performance Management Assessment
  - (D) Performance Management Appraisal
109. Assessment and regulation of the day-to-day functions of the organization is referred to as
- (A) Systems Control
  - (B) Tactical Control
  - (C) Management Control
  - (D) Activity Control
110. T-groups in an organization means
- (A) Group of people participating in organizational development away from work place
  - (B) Group of individuals engaged in organizational design and development
  - (C) Group of people participating in organizational development in the factory
  - (D) A group that plans marketing strategy of the organization
111. Rational people act only when the marginal benefit of the action exceeds
- (A) Marginal cost
  - (B) Fixed cost
  - (C) Variable cost
  - (D) Opportunity cost
112. Who made the most famous observation in all of economics: Markets are guided by an "Invisible Hand"?
- (A) Karl Marx
  - (B) Fischer Black
  - (C) Adam Smith
  - (D) John Maynard Keynes
113. A decrease (Shortage of Supply) in the supply for a good will tend to cause an \_\_\_\_\_ in the equilibrium price
- (A) Increase
  - (B) Decrease
  - (C) Neutral
  - (D) Shortage
114. You own a collection of Movies and you know that you could sell for Rs 5000. If you decide to keep them, the Rs 5000 is the \_\_\_\_\_ cost of doing so
- (A) Variable cost
  - (B) Fixed cost
  - (C) Opportunity cost
  - (D) Fixed and variable cost
115. People face Trade-offs because, wants are unlimited and resources are
- (A) Unlimited
  - (B) Unwanted
  - (C) Excess
  - (D) Limited

116. In a two sector economy circular flow diagram, \_\_\_\_\_ holds the factors of production
- (A) Economy (B) Households  
(C) Government (D) Public
117. If a small percentage increase in the price of a good greatly reduces the quantity demanded for that good, the demand for that good is
- (A) Income inelastic (B) Price inelastic  
(C) Price elastic (D) Unit price elastic
118. Which of the following shifts the demand for watches to the right?
- (A) An increase in the price of watches  
(B) A decrease in the price of watch batteries if watch batteries and watches are complements  
(C) A decrease in consumer incomes if watches are a normal good  
(D) A decrease in the price of watches
119. Economic profit is equal to total revenue minus
- (A) Variable cost (B) Implicit cost  
(C) Explicit cost (D) Fixed cost
120. If there are implicit costs of production,
- (A) Accounting profit will exceed economic profit  
(B) Economic profit will always be zero  
(C) Accounting profit will always be zero  
(D) Economic profit will exceed accounting profit
121. When calculating the average rate of debt expansion for a company, the correct mean to use is the
- (A) Arithmetic mean (B) Weighted mean  
(C) Geometric mean (D) Either (A) or (B)
122. Which of the following is the first step in calculating the median of a data set?
- (A) Average the middle two values of the data set  
(B) Array the data  
(C) Determine the relative weights of the data values in terms of importance  
(D) None of these

123. Suppose you wish to test whether a population mean is significantly larger or smaller than 10. You take a sample and find  $x = 8$ . What should your alternative hypothesis be?
- (A)  $\mu < 10$   
(B)  $\mu \neq 10$   
(C)  $\mu > 10$   
(D) Cannot be determined from the information given
124. Suppose that a hypothesis test is being performed for a process in which a Type I error will be very costly, but a Type II error will be relatively inexpensive and unimportant. Which of the following would be the best choice for  $\alpha$  in this test?
- (A) 0.01                      (B) 0.10                      (C) 0.25                      (D) 0.50
125. For a particular hypothesis test,  $\alpha = 0.05$  and  $\beta = 0.10$ . The power of this test is
- (A) 0.15                      (B) 0.90                      (C) 0.85                      (D) 0.95
126. Assume that a chi-square test is to be performed on a contingency table with four rows and four columns. How many degrees of freedom should be used?
- (A) 16                      (B) 8                      (C) 9                      (D) 6
127. The F ratio contains
- (A) Two estimates of the population variance  
(B) Two estimates of the population mean  
(C) One estimate of the population mean and one estimate of the population variance  
(D) None of these
128. In the equation  $Y = A + BX + e$ , the  $e$  represents
- (A) The X-intercept of the observed data  
(B) The value of Y to which others are compared to determine the best fit  
(C) Random disturbances from the population regression line  
(D) None of these
129. Signs of the possible presence of multicollinearity in a multiple regression are
- (A) Significant t values for the coefficient  
(B) Low standard errors for the coefficients  
(C) A sharp increase in a t value for the coefficient of an explanatory variable when another variable is removed from the model  
(D) All of these

130. For sample of size greater than 30, the sampling distribution of the rank-correlation coefficient is approximately which distribution?
- (A)  $t$  (B) Binomial  
(C) Chi-square (D) Normal
131. The most viable goal of financial management is
- (A) Profit maximization (B) Wealth maximization  
(C) Sales maximization (D) Asset maximization
132. Finance function involves
- (A) Procurement of finance only  
(B) Expenditure of funds only  
(C) Safe custody of funds only  
(D) Procurement and effective utilization of funds
133. A capital budgeting technique which is based upon accounting information rather than cash flows is
- (A) Payback period (B) Net present value  
(C) Average rate of return (D) Internal rate of return
134. Internal rate of return means
- (A) The discount rate that equates the present value of cash flows with the initial investment associated with a project  
(B) The amount of time required for a firm to recover its initial investment in a project  
(C) It measures the present value of returns per rupee invested  
(D) None of the above
135. X Ltd., has 15% perpetual debt of Rs.1, 00,000. The tax rate is 35%. Debt is issued at par. Its cost of capital before tax is
- (A) 10% (B) 15% (C) 20% (D) 25%
136. ABC Ltd., issues 11% irredeemable preference shares of the face value of Rs.100 each. Floatation costs are estimated at 5% of the expected sale price. Cost of preference shares before tax with an assumption that preference shares are issued at par
- (A) 12.6% (B) 15.6% (C) 14.3% (D) 11.6%

137. Gross working capital means
- (A) Excess of current assets over current liabilities
  - (B) Total current assets
  - (C) Excess of current liabilities over current assets
  - (D) Total current liabilities
138. Zero working capital means
- (A) Fixed assets plus current assets
  - (B) Inventories plus receivables minus payables
  - (C) Fixed assets minus fixed liabilities
  - (D) None of the above
139. The firm's ability to use fixed operating costs to magnify the effects of changes in sales on its earnings before interest and taxes is
- (A) Operating leverage
  - (B) Financial leverage
  - (C) Combined leverage
  - (D) All the above
140. "A change in the financial leverage will lead to a corresponding change in the overall cost of capital as well as the total value of the firm" is an argument of
- (A) NOI approach
  - (B) MM approach
  - (C) NI approach
  - (D) None of these
141. "A bird in the hand is better than two in the bush" is the argument of
- (A) Walter
  - (B) MM's model
  - (C) Adam smith
  - (D) Gordon
142. Payment of a certain minimum amount of dividend regularly is
- (A) Stock dividend
  - (B) Dividend stability
  - (C) Deemed dividend
  - (D) Interim dividend
143. The price of one currency expressed in term of the currency of another country is called
- (A) Exchange rate
  - (B) European Quotation
  - (C) Forward rate
  - (D) All the above
144. The rate of exchange applicable for delivery of foreign exchange at a future date is known as
- (A) Spot rate
  - (B) Options price
  - (C) Swaps price
  - (D) Forward exchange rate

145. The buying of foreign currency from a foreign exchange market where it is cheaper and selling in another foreign exchange market where it is costly is known as
- (A) Arbitrage (B) Basis  
(C) Geographical arbitrage (D) Spread
146. An act of betting on an uncertain outcome is called
- (A) Investment (B) Gambling  
(C) Speculation (D) None of these
147. "Every speculation is investment but every investment is not speculation". This means
- (A) Whenever one invests, it is an investment  
(B) Speculation is the inherent part of investment  
(C) Every activity of investment and speculation has the basic dimensions of investment  
(D) None of these
148. Badla transaction is a tool to
- (A) Make pure investment (B) Donate the money  
(C) Speculate (D) All the above
149. CRISIL stands for
- (A) Credit rating information services of India Ltd.  
(B) Credit reconstruction information services of India Ltd.  
(C) Common rural innovation services literature  
(D) None of these
150. X had purchased a bond at a price of Rs.800 with a coupon payment of Rs.150 and sold it for Rs.1000. What is his holding period return?
- (A) 40% (B) 51.32% (C) 42.75% (D) 43.75%
151. A standardized measure of systematic risk based upon an asset's covariance with the market portfolio is
- (A) Beta (B) Alpha  
(C) Unsystematic risk (D) All the above



152. A theory concerned with deriving the expected or required rates of return on risky assets based on the asset's systematic risk relative to a market portfolio is
- (A) Arbitrage pricing theory (B) MM theory  
(C) Capital asset pricing model (D) Gordon's model
153. The security prices fully reflect all information from both public and private sources is known as
- (A) Weak form of efficient market hypothesis  
(B) Semi strong form of efficient market hypothesis  
(C) Strong form of efficient market hypothesis  
(D) None of these
154. Which one of the following is a risky asset?
- (A) 91 day treasury bill (B) Dated securities issued by RBI  
(C) Equity stock (D) All the above
155. From the following data relative to a portfolio A, calculate Sharpe's ratio. Average annual return 15.6%; Standard deviation 27%; Risk free rate 6%.
- (A) 0.24 (B) 0.34  
(C) 0.44 (D) None of these
156. Portfolio theory was developed by
- (A) W. Sharpe (B) Jagannathan  
(C) A. Ross (D) H. Markowitz
157. Three factor asset pricing model was developed by
- (A) Daniel Titman (B) Fama-French  
(C) Jensen (D) Trenor
158. CAPM anomalies include
- (A) Size effect  
(B) Book Equity to Market Equity effect  
(C) Momentum effect  
(D) All of these

159. The set of portfolios that has the maximum rate of return for every given level of risk, or the minimum risk for every potential rate of return is known as
- (A) Efficient frontier (B) Inefficient frontier  
(C) Strong form of market efficiency (D) None of these
160. The portfolio that includes all risky assets with relative weights equal to their proportional market values is called
- (A) Mutual fund (B) Optimum portfolio  
(C) Market portfolio (D) Commodity derivatives
161. Derivatives are the transactions which derive the value from
- (A) Interest rate differential  
(B) Underlying asset  
(C) Price difference in two difference market  
(D) None of these
162. When an investor who already has an obligation in the underlying asset and takes a position in the derivatives on the same underlying asset to eliminate the risk, it is
- (A) Hedging (B) Speculation  
(C) Arbitrage (D) None of these
163. Capital market and money market are regulated by
- (A) SEBI and RBI respectively (B) RBI and SEBI respectively  
(C) SEBI and IRDA respectively (D) PFRDA and SEBI respectively
164. The participants in the derivatives market can be
- (A) Speculator (B) Arbitrageur  
(C) Hedger (D) All of these
165. Which of the following was the first one to introduce currency derivatives trading in the world?
- (A) Bombay stock exchange (B) National stock exchange  
(C) Tokyo stock exchange (D) Chicago mercantile exchange
166. Buying and selling call or put option with the same strike price but different expiration dates is called
- (A) Long hedge (B) Short hedge  
(C) Horizontal option spread (D) None of these

167. A covered call is
- (A) Simultaneous buying and writing a call option at different strike price
  - (B) Simultaneous buying a call and a put option at the same strike price
  - (C) Buying a call option with a short position in the underlying asset
  - (D) None of these
168. The minimum margin, which a customer must maintain with the member at all times is known as
- (A) Initial margin
  - (B) Maintenance margin
  - (C) Margin call amount
  - (D) None of these
169. In which option does the buyer get the right to buy the underlying asset any time during the contract period?
- (A) Chinese option
  - (B) Tokyo option
  - (C) American option
  - (D) European option
170. The writer of the option is also known as
- (A) Buyer of the option
  - (B) Holder of the option
  - (C) Seller of the option
  - (D) None of these
171. Exercise price is alternatively called
- (A) Book price
  - (B) Strike price
  - (C) Market price
  - (D) All of these
172. GAAP stands for
- (A) Generally anti avoidance principle
  - (B) Generally avoidable accounting principle
  - (C) Generally accepted accounting principle
  - (D) None of these
173. When proprietor takes money from business for his personal use, it is called as
- (A) Drawing
  - (B) Income
  - (C) Business expense
  - (D) None of these
174. Interest on drawing is to be
- (A) Debited to P&L A/c
  - (B) Credited to P&L A/c
  - (C) Debited to Trading A/c
  - (D) None of these

175. Which one of the following is a non-operating expenditure?  
(A) Salaries (B) Advertisement  
(C) Interest paid (D) Depreciation
176. Which one of following is not a current asset?  
(A) Stock (B) Preliminary expenses  
(C) Debtors (D) Accounts receivable
177. Contribution Rs.3000; Sales Rs.15,000; Profit Volume ratio is  
(A) 10% (B) 15% (C) 20% (D) 25%
178. Stock Rs.1400; Cash Rs.3000; Debtors Rs.500; Bank Rs.600; Current liabilities Rs.2000. Quick ratio is  
(A) 3.05 (B) 2.05 (C) 1.75 (D) 2.50
179. Sales Rs.1,00,000; variable costs Rs.60,000; fixed costs Rs.30,000. Margin of safety is  
(A) Rs.25,000 (B) Rs.15,000 (C) Rs.35,000 (D) None of these
180. The apex financial institution in India that promotes housing finance is  
(A) Housing and Urban development corporation (HUDCO)  
(B) Housing development finance corporation Ltd. (HDFC)  
(C) Cooperative housing finance society  
(D) National housing bank (NHB)
181. The money lent in money market for a period of 2 days to 15 days is referred to as  
(A) Call money (B) Demand loan (C) Notice money (D) None of these
182. The minimum maturity period for a certificate of deposit is  
(A) 15 days (B) One month (C) Three months (D) Six months
183. Gilt edged securities are the bonds issued by  
(A) Corporate (B) Central Government  
(C) Multinational corporations (D) None of these
184. Real time gross settlement (RTGS) was started by  
(A) ICICI (B) SBI (C) RBI (D) IOB

185. A firm sells its trade debts at a discount to a financial institution is
- (A) Factoring (B) Hire purchase  
(C) Outsourcing (D) Securitization
186. Yield to maturity is
- (A) The interest rate that makes the present value of a bond's payment equal to its price  
(B) The interest rate that makes the future value of a bond's payment equal to its price  
(C) The yield on a bond till the bond is called  
(D) None of these
187. A bond that the issuer can redeem before the maturity date is
- (A) Puttable bond (B) Outstanding bond  
(C) Callable bond (D) Deep discounted bond
188. A process in which the issue price or buy back price of a security is decided by the market forces is
- (A) Preferential allotment (B) Private placement  
(C) Underwriting (D) Book building
189. A system in which securities are converted from physical mode to electronic mode is
- (A) Dematerialization (B) Online trading  
(C) Open outcry system (D) None of these
190. Developing, designing and implementing creative financial contracts and processes is
- (A) Financial literacy (B) Financial stability  
(C) Financial engineering (D) Financial management
191. \_\_\_\_\_ helps to channelize the savings into investments by helping firms and Industrial organizations to raise funds from the financial market.
- (A) Investment Bank (B) Development Bank  
(C) Lead Bank (D) Agency Bank
192. \_\_\_\_\_ are the financial institutions that directly participate in the economic development of the country by undertaking promotional activities and providing long term finance to business units.
- (A) Investment Banks (B) Development Banks  
(C) Commercial Banks (D) Merchant Banks

193. \_\_\_\_\_ is an institution that provides support, knowledge and resources to individuals and organizations for starting, improving, expanding and sustaining their business and investments.
- (A) Merchant Bank (B) Development Bank  
(C) Lead Bank (D) Agency Bank
194. A set of activities that are undertaken to ensure efficient running of a corporate enterprise at its maximum potential through effective management of finance is known as \_\_\_\_\_
- (A) Financial Services (B) Economic Services  
(C) Corporate Services (D) Advisory Services
195. \_\_\_\_\_ refers to maintaining proper combination of securities in a manner that gives maximum return
- (A) Financial Management (B) Corporate Management  
(C) Portfolio Management (D) Security Management
196. \_\_\_\_\_ is a non-statutory body for regulating the securities market
- (A) SEBI (B) RBI  
(C) IRDA (D) FMC
197. \_\_\_\_\_ acts as the apex monetary authority of the country
- (A) SEBI (B) RBI  
(C) IRDA (D) FMC
198. \_\_\_\_\_ a place for large institutions and Government to manage their short-term cash needs
- (A) Money Market (B) Capital Market  
(C) Primary Market (D) Secondary Market
199. Public issue made by a corporate entity for the first time is called
- (A) NFO (B) IPO (C) FPO (D) None of these
200. \_\_\_\_\_ is a method of marketing the securities of a company by converting its accumulated reserves and surplus into
- (A) Equity Shares (B) Preference Shares  
(C) Bonus Shares (D) Right Shares