Code No. : **1966/2020**

Question Booklet Alpha Code **B**

Total No. of Questions : 160

Time : 2 Hours

Each question carries half mark **Marks : 80 (160 × ½)**

1. The load instruction is mostly used to designate a transfer from memory to a processor register known as
   A) Accumulator B) Instruction Register
   C) Program counter D) Memory address Register

2. If memory access takes 20 ns with cache and 110 ns without it, then the ratio (cache uses a 10 ns Memory) is
   A) 83% B) 90% C) 88% D) 87%

3. _____ register keeps track of the instructions stored in program stored in memory
   A) AR (Address Register) B) XR (Index Register)
   C) PC (Program Counter) D) AC (Accumulator)

4. The circuit used to store one bit of data is known as
   A) Register B) Encoder C) Decoder D) Flip Flop

5. Which of the following is not a weighted code?
   A) Decimal Number system B) Excess 3 code
   C) Binary number System D) None of these

6. Cache memory acts between
   A) CPU and RAM B) RAM and ROM C) CPU and Hard Disk D) None of these

7. Memory unit accessed by content is called
   A) Read only memory B) Programmable Memory
   C) Virtual Memory D) Associative Memory

8. A system program that combines the separately compiled modules of a program into a form suitable for execution
   A) assembler B) linking loader C) cross compiler D) none of these

9. The strategy of allowing processes that are logically runnable to be temporarily suspended is called
   A) preemptive scheduling B) non preemptive scheduling
   C) shortest job first D) first come first served

10. The LRU algorithm
A) pages out pages that have been used recently
B) pages out pages that have not been used recently
C) pages out pages that have been least used recently
D) pages out the first page in a given area

11. Which of the following is/are the levels of implementation of data structure?
A) Abstract level B) Application level
C) Implementation level D) All of these

12. A binary search tree whose left subtree and right subtree differ in height by at most 1 unit is called
A) AVL tree B) Red-black tree C) Lemma tree D) None of these

13. _____ level is where the model becomes compatible executable code.
A) Abstract level B) Application level
C) Implementation level D) All of these

14. Stack is also called as
A) Last in first out B) First in last out
C) Last in last out D) First in first out

15. Which of the following is true about the characteristics of abstract data types?
(i) It exports a type.
(ii) It exports a set of operations
A) True, False B) False, True
C) True, True D) False, False

16. Which of the following is not the part of ADT description?
A) Data B) Operations C) Both of these D) None of these

17. Which of the following cannot be checked in a switch-case statement?
A) Character B) Integer C) Float D) Enum

18. _____ is a pile in which items are added at one end and removed from the other.
A) Stack B) Queue C) List D) None of these

19. Which of the following is not logical operator?
A) & B) && C) || D) !

20. In which header file is the NULL macro defined?
A) stdio.h B) stddef.h
C) stdio.h and stddef.h D) math.h

21. Which of the following data structure can't store the non-homogeneous data elements?
A) Arrays B) Records C) Pointers D) Stacks

22. When we mention the prototype of a function?
A) Defining B) Declaring C) Prototyping D) Calling

23. What is (void*)0?
A) Representation of NULL pointer B) Representation of void pointer
C) Error D) None of these

24. By default a real number is treated as a
A) float B) double C) long double D) far double

25. How would you round off a value from 1.66 to 2.0?
A) ceil(1.66) B) floor(1.66) C) roundup(1.66) D) roundto(1.66)

26. Which of the following is not the member of class?
A) Static function B) Friend function
C) Const function D) Virtual function

27. Which of the following concepts means determining at runtime what method to invoke?
A) Data hiding B) Dynamic Typing
C) Dynamic binding D) Dynamic loading

28. How many instances of an abstract class can be created?
A) 1 B) 5 C) 13 D) 0

29. Which of the following concepts of OOPS means exposing only necessary information to client?
A) Encapsulation B) Abstraction C) Data hiding D) Data binding

30. Cout is a/an
A) operator B) function C) object D) macro

31. Which of the following is an abstract data type?
A) int B) double C) string D) class

32. Which of the following approach is adopted by C++?
A) Top-down B) Bottom-up C) Right-left D) Left-right

33. Which is a valid keyword in java?
A) interface B) string C) float D) unsigned

34. Which interface does java.util.Hashtable implement?
A) Java.util.Map B) Java.util.Hash Table
C) Java.util.List D) Java.util.Collection

35. Which is valid declaration of a float?
A) float f = 1F B) float f = 1.0; C) float f = "1"; D) float f = 1.0d;

36. Which is a valid declaration within an interface?
A) public static short stop = 23; B) protected short stop = 23;
C) transient short stop = 23; D) final void madness(short stop);

37. What allows the programmer to destroy an object x?
A) x.delete()
B) Runtime.getRuntime().gc()
C) Only the garbage collection system can destroy an object
D) x.finalize()

38. Which is true about a method-local inner class?
A) It must be marked final B) It can be marked abstract
C) It can be marked public D) It can be marked static

39. Which method must be defined by a class implementing the java.lang.Runnable interface?
A) void run() B) public void run()
C) public void start() D) void run(int priority)

40. The view of total database content is
A) Conceptual view B) Internal view C) External view D) Physical View

41. DML is provided for
A) Description of the logical structure of a database
B) The addition of new structures in the database system
C) Manipulation and processing of the database
D) Definition of a physical structure of the database system

42. ODBC stands for
A) Object Database Connectivity B) Oral Database Connectivity
C) Oracle Database Connectivity D) Open Database Connectivity

43. The database schema is written in
A) HLL B) DML C) DDL D) DCL

44. The database environment has all of the following components except
A) users B) separate files
C) database D) database administrator

45. The property/properties of a database is/are
A) It is an integrated collection of logically related records
B) It consolidated separate files into a common pool of data records
C) Data stored in a database is independent of the application programs using it
D) All of the above

46. Count function in SQL returns the number of
A) values B) distinct values C) groups D) columns

47. Which one of the following statements is false?
A) The data dictionary is normally maintained by the database administrator
B) Data elements in the database can be modified by changing the data dictionary
C) The data dictionary contains the name and description of each data element
D) A data dictionary is a tool used exclusively by the database administrator

48. A DBMS query language is designed to
A) support end users who use English-like commands
B) support in the development of complex applications software
C) specify the structure of a database
D) all of the above

49. SET concept is used in
A) Network Model B) Hierarchical Model C) Relational Model D) None of these

50. Which of the following is a valid SQL type?
A) CHARACTER B) NUMERIC C) FLOAT D) All of these

51. An instance of relational schema R (A, B, C) has distinct values of A, including NULL values. Which one of the following is true?
A) A is a candidate key
B) A is not a candidate key
C) A is a primary key
D) Both (A) and (C)

52. A large computer information system maintains many different computer files. Which amongst them is called a perpetual file?
A) Specialized file B) Log file C) Master file D) Update file

53. Which of the following is correct regarding Aggregate functions?
A) It takes a list of values and return a single values as result
B) It takes a list of values and return a list of values as result
C) It takes a single value and returns a list of values as result
D) It takes a single value and returns a single value as result

54. The applications of the Client and Server Model are
A) World Wide Web
B) Network Printing
C) Email
D) All of these

55. The local operating system on the server machine passes the incoming packets to the
A) server stub
B) client stub
C) client operating system
D) none of these

56. Networks where end user workstations are tied to LAN servers to share resources and application processing
A) Client/Server networks
B) Internet worked enterprise
C) Information super highway
D) Business applications of telecommunications

57. RMI uses stub and skeleton for communication with the _____ object
A) client
B) remote
C) server
D) any

58. An interface of transaction-processing systems to connect clients with a server is named
A) Transactional remote process call
B) Transactional remote procedure call
C) Transactional remote program
D) Transactional remote processing

59. In two-tier client/server architecture, running of application programs and user interface programs is in control of
A) modulation side
B) client side
C) server side
D) host side

60. Type of server in two-tier architectures which provides data to client stored on disk pages is called
A) transaction server
B) functional server
C) disk server
D) data server

61. What is the default namespace?
A) the namespace used by default when no namespace is declared
B) the namespace used when two or more namespaces are referenced
C) the namespace that is referenced with the xmlns attribute, but without a prefix
D) none of the above

62. To use XSLT in an XML systems
A) the input and output of the XSLT processor must be unparsed XML documents
B) the input and output of the XSLT processor must be hierarchical tree representing an XML document
C) the XSLT processor must be called from a web agent
D) the XSLT processor must be given the DTD as well as the XML document instance

63. What is the correct HTML for creating a hyperlink?
A) A
B) <a>B
C) example
D) example

64. Which of the following is NOT a Hotspot tool?
A) Orthogonal Hotspot Tool
B) Rectangular Hotspot Tool
C) Oval Hotspot Tool
D) Polygon Hotspot Tool

65. The elements <DIV> and <SPAN> have the following characteristics
A) Element <DIV> inherits properties defined for <SPAN> in a stylesheet
B) Elements <SPAN> and <DIV> define content to be inline or block-level
C) <DIV> and <SPAN> are used as alternatives for the element <P>
D) <DIV> is used inside element <P>

66. Which is not a property of attribute Behaviour of <Marquee> tag?
A) alternate B) blur C) scroll D) slide

67. What type of technology allows you to verbally speak with someone over the Internet?
A) Wiki B) Social network C) Ephone D) VoIP

68. Which of the following is a wrong example of network layer?
A) Internet Protocol (IP) - ARPANET
B) X.25 Packet Level Protocol (PLP)-ISO
C) Source routing and domain naming-USENet
D) X.25 level 2-ISO

69. Which of the following is private IP address?
A) 12.0.0.1 B) 168.172.19.39 C) 172.15.14.36 D) 192.168.24.43

70. Which of the following access lists will allow only HTTP traffic into network 196.15.7.0?
A) access-list 100 permit tcp any 196.15.7.0 0.0.0.255 eq www
B) access-list 10 deny tcp any 196.15.7.0 eq www
C) access-list 100 permit 196.15.7.0 0.0.0.255 eq www
D) access-list 110 permit ip any 196.15.7.0 0.0.0.255

71. A default Frame Relay WAN is classified as what type of physical network?
A) Point-to-point
B) Broadcast multi-access
C) Non-broadcast multi-access
D) Non-broadcast multipoint

72. What is the maximum number of IP addresses that can be assigned to hosts on a local subnet that uses the 255.255.255.224 subnet mask?
A) 14 B) 15 C) 16 D) 30

73. A network administrator needs to configure a router with a distance-vector protocol that allows classless routing. Which of the following satisfies those requirements?
A) IGRP B) OSPF C) RIPv1 D) EIGRP

74. Pat Address Translation is also termed what?
A) NAT Fast B) NAT Static
C) NAT Overload D) Overloading Static

75. How long is an IPv6 address?
A) 32 bits B) 128 bytes C) 64 bits D) 128 bits

76. Which protocol reduces administrative overhead in a switched network by allowing the configuration of a new VLAN to be distributed to all the switches in a domain?
A) STP B) VTP C) DHCP D) IS

77. Which of the following describe router functions?
A) Packet switching B) Packet filtering
C) Internet work communication D) All of these

78. What is the frequency range of the IEEE 802.11a standard?
A) 2.4Gbps B) 5Gbps C) 2.4GHz D) 5GHz

79. What is the purpose of Spanning Tree Protocol in a switched LAN?
A) To provide a mechanism for network monitoring in switched environments
B) To prevent routing loops in networks with redundant paths
C) To prevent switching loops in networks with redundant switched paths
D) To manage the VLAN database across multiple switches

80. The topology with highest reliability is
A) Bus topology B) Star topology
C) Ring topology D) Mesh topology

81. You want to improve network performance by increasing the bandwidth available to hosts and limit the size of the broadcast domains. Which of the following options will achieve this goal?
A) Managed hubs B) Bridges
C) Switches D) Switches configured with VLANs

82. Software project manager is engaged with software management activities. He is responsible for
A) Project planning B) Monitoring the progress
C) Communication among stakeholders D) All of these

83. When elements of module are grouped because the output of one element serves as input to another elements and so on, it is called
A) Functional cohesion B) Communicational cohesion
C) Sequential cohesion D) Procedural cohesion

84. Which tool consist of programming environments like IDE, in-built modules library and simulation tools?

A) Web development tools
B) Prototyping tools
C) Programming tools
D) Design tools

85. Hazard analysis focuses on the identification and assessment of potential hazards that can cause the

A) External problems
B) Internal problems
C) Both (A) and (B)
D) None of these

86. Which model gives the overall reliability of the system that is projected and certified?

A) Sampling model
B) Component model
C) Certification model
D) Both (A) and (B)

87. Which aspect is important when the software is moved from one platform to another?

A) Maintenance
B) Operational
C) Transitional
D) All of the above

88. Which chart is a tool that depicts project as network diagram that is capable of graphically representing main events of project in both parallel and consecutive way?

A) PERT chart
B) Gantt chart
C) Both (A) and (B)
D) None of the above

89. What can static analysis NOT find?

A) The use of a variable before it has been defined
B) Memory leaks
C) Unreachable ("dead") code
D) Array bound violations

90. Alpha and Beta Testing are forms of

A) Acceptance testing
B) Integration testing
C) System testing
D) Unit testing

91. The model in which the requirements are implemented by its category is

A) Evolutionary Development Model
B) Waterfall Model
C) Prototyping
D) Iterative Enhancement Model

92. A COCOMO model is

A) Common Cost Estimation Mode
B) Constructive Cost Estimation Model
C) Complete Cost Estimation Model
D) Comprehensive Cost Estimation Model

93. SRD stands for

A) Software Requirements Definition
B) Structured Requirements Definition
C) Software Requirements Diagram
D) Structured Requirements Diagram

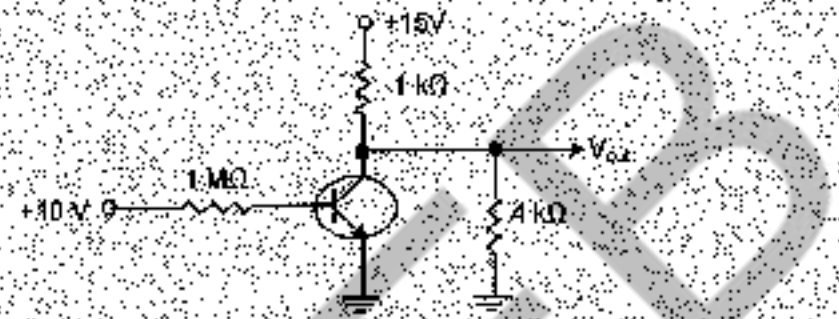
94. Which is the most important feature of spiral model?

A) Quality management
B) Risk management
C) Performance management
D) Efficiency management

95. ER model shows the

A) Static view
B) Functional view
C) Dynamic view
D) All these

96. Why is the given circuit called an inverter?



A) The output is the opposite (inverse) of the input
B) The output is the same as the input
C) The output is in phase with the input
D) There is no output

97. What can a relay provide between the triggering source and the output that semiconductor switching devices cannot?

A) Total isolation
B) Faster
C) Total isolation and higher current rating
D) High current rating

98. A diode placed in parallel across a relay coil serves what function?

A) To regulate input voltage
B) To protect the coil from arcing
C) To ensure most of the current passes through the coil
D) To reduce arcing across the relay contacts

99. A full subtracter circuit requires

A) Two inputs and two outputs
B) Two inputs and three outputs
C) Three inputs and one output
D) Three inputs and two outputs

100. The terminal count of a modulus-11 binary counter is

A) 1010
B) 1000
C) 1001
D) 1100

OSER

101. Maximum Borrowing Power of a Primary Agricultural Credit society in Kerala is 150 times of its

A) Paid up share capital
B) Reserves
C) Deposits
D) Own funds

102. Amendments in Articles 19(1)(C), 43 (B) and insertion of Part IX-B in the constitution of India was made in the _____ constitutional Amendment.

A) 97th B) 111th C) 98th D) 95th

103. How many persons belonging to different families are required to register a new co-operative society?

A) 5 B) 20 C) 25 D) 30

104. The first co-op legislation in India was made in

A) 1969 B) 1952 C) 1935 D) 1904

105. The administrative control of Primary Co-operative societies shall vest with

A) Reserve Bank
B) NABARD
C) Registrar of Co-operative Societies
D) Director of Audit

106. Scheduled Co-operative Banks are those banks which are listed in the second schedule of

A) BR Act 1949
B) NI Act 1881
C) RBI Act 1934
D) NABARD Act 1881

107. Which is the main source of profit for a co-operative credit society?

A) Interest income B) Misc. Income C) Interest spread D) Deposit

108. Banks are Called _____ because they invest or lend funds of depositors who themselves are unable to lend their funds due to risk

A) financial institutions
B) financial intermediaries
C) financial agents
D) none of the above

109. Which of the following is not a categorisation of banks according to ownership?

A) Co-operative Sector
B) Public Sector
C) Rural Sector
D) Private Sector

110. The major portion of the liabilities of the Kerala bank is :

A) Own funds B) Deposits C) Borrowings D) Profit

111. The financial sector reforms began in :

A) 1989-90 B) 1990-91 C) 1991-92 D) 1992-93

112. Members save money compulsorily and lend it among themselves is a distinct feature of

A) SHG B) JLG C) MFI D) FC

113. A person or entity that maintains an account and / or has a business relationship with the Bank is called

A) Customer B) Depositor C) Borrower D) Debtor

114. Salary and other payment to staff is

A) Equity cost B) Risk cost
C) Financial cost D) Transaction cost

115. Who is the present Governor of RBI?

A) Shri Shaktikanta Das B) Dr. Raghuram Rajan
C) Shri Rakesh Mohan D) Dr. Subba Reddy

116. Co-operatives trace their origins to

A) England's Industrial Revolution B) Chinese Communist Revolution
C) Cuban Revolution D) French Revolution

117. There are _____ Co-operative Principles reformulated by ICA

A) 5 B) 6 C) 7 D) 11

118. Co-operation is a midway between

A) Communism and Socialism B) Capitalism and Socialism
C) Capitalism and Communism D) All of the above

119. The word "Co-operation" is derived from the Latin word "Co-operari" which means

A) common interest B) economic welfare C) working together D) self help

120. The Apex co-operative institution to provide long term agriculture credit in Kerala is

A) Kerala State Co-operative Bank
B) Urban Co-operative Bank
C) Kerala State Co-operative Marketing Federation
D) Kerala State Co-operative Agriculture and Rural Development Bank

121. Find the wrong term in the following series

49, 49, 50, 54, 60, 79, 104

A) 60 B) 49 C) 104 D) 54

122. A person walks 9 Km to the South. From there he walks 5 Km to the North. After this he walks 3 Km to the West. In which direction and how far is he now from the starting point?

A) 4 Km South B) 4 Km North
C) 5 Km North-West D) 5 Km South West

123. *P* and *Q* can finish a work in 15 and 10 days respectively. *Q* starts the work and leaves it after 5 days. The number of days in which *P* can complete the work is

A) 6½ days B) 7½ days C) 8 days D) 9 days

124. *A* is *B*'s brother. *C* is *B*'s mother. *D* is *C*'s father. *E* is *D*'s Mother. How is *A* related to *E*

A) Grand Daughter B) Great Grandson C) Grand Son D) Grand Mother

125. M, N, O, L, R, I, V, ——?——

A) A B) E C) F D) H

126. Select the missing number from the given responses

5 5 2
2 4 1
8 3 10
40 30 ?

A) 10 B) 12 C) 13 D) 20

127. Six girls are standing in a circle facing to the centre. Bindu is to the left of Renuka. Rekha is in between Bindu and Mumtaz. Jena is in between Renuka and Nirmala. Who is to the left of Mumtaz?

A) Rekha B) Nirmala C) Renuka D) Bindu

128. Complete the series ADG, GJM, ——?——

A) NOT B) MOQ C) MPS D) WTO

Complete the series

129. 5, 6, 9, 15 ——?——, 40

A) 2 B) 25 C) 27 D) 33

130. 4, 9, 25, ——121, 169, 289, 361

A) 49 B) 64 C) 81 D) 87

I. Choose the correct **preposition** from the following

131. My father hung the calendar ———————— the wall
A) in B) at C) on D) none of these

132. Her mother moved the stationery ———————— a convenient shelf
A) onto B) in C) at D) none of these

II. Choose the correct **antonym** from the following

133. Hostility
A) Rude B) Enmity C) Quarrelsome D) Friendship

134. Juvenile
A) Senile B) Junior C) Elder D) None of these

III. Choose the correct tense of the **verb** from brackets for the following

135. One of the boys (take part) in the procession
A) take part B) takes part C) are taking part D) none of these

136. He ———————— have a valuable present, if he comes first in the competition
A) will B) shall C) is D) none of these

IV. Choose the correct **meaning** from the following

137. Abinitio
A) Total B) From the very beginning
C) Sum D) Single

138. Bonhomie
A) Good nature B) Faith C) Religious D) Hard work

V. Choose the correct **synonym** from the following

139. Blasphemy
A) religious B) irreligious C) harsh D) kind

140. Reprimand
A) honour B) compliment C) scold D) confirm

141. Shore temple is located in

A) Tamilnadu B) Karnataka
C) Kerala D) Andhra Pradesh

142. Who was the ceptain of the IPL Mumbai team?

A) M.S. Dhon B) Virat Kohli C) Rahul Dravid D) Rohit Sharma

143. Mount Kilimanjaro is located in

A) Zimbabwe B) Tanzania C) Kenya D) South Africa

144. How many districts of Kerala has coastal areas?

A) 8 B) 9 C) 10 D) 11

145. What is the total coast line of Kerala in _____ kms?

A) 590 B) 600 C) 610 D) 540

146. Thunchath Ezhuthachan Malayalam university is based at

A) Thrissur B) Shornur C) Tirur D) Paravur

147. Which country has the highest first wicket partnership set in 2019 for the One Day international cricket?

A) India B) England C) Pakistan D) West Indies

148. The first Chief of Defense staff for India

A) Gen. Dominic B) Gen Rawat C) Gen. Khan D) Gen. Mohite

149. Reverse mortgage is a term used in

A) Banking B) Agriculture C) Manufacturing D) Flying

150. Who among the following is not awarded Bharat Ratna?

A) Prof. C.N.R. Rao B) Sachin Tendulkar
C) M.G. Rameshandran D) M. S. Dhoni

151. Former President of India, Pratibha Singh Patil belongs to

A) Haryana B) Punjab C) Maharashtra D) Chattisgarh

152. India won _____ medal in Field Hockey in 2018 Asian Games.

A) Gold B) Silver C) Bronze D) No medals

153. The film, Idukki Gold was based on the story by

A) Anil Panachooran B) Santhosh Echikanam
C) Sumangala D) S. Ramesan Nair

154. Who won the Vallathol Award 2019

A) Murugan Kattakada B) K.G.C. Nair
C) Paul Zacharia D) Rajan madavana

155. The latest district carved out of Tirunelveli in Tamilnadu is

A) Tenkasi B) Sankarankoil C) Kovilpatti D) Courtallam

156. Kodaikanal is situated in which hills?

A) Palani B) Munnar C) Shervarayar D) Otacamund

157. Bhutan shares its border with _____ states of India.

A) 2 B) 3 C) 4 D) 5

158. In 1963, the most important decision was taken on the national scene

A) National bird was recognised B) National animal was recognised
C) National Flower was recognised D) National logo was recognised

159. Nagpur being Orange capital is also known as

A) Lion gateway of India B) Tiger gateway of India
C) Deer gateway of India D) Parrot gateway of India

160. C. Rangarajan wrote the following book

A) Growth of economy B) Growth and Finance
C) Growth of India D) India 2020