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Question Booklet Alpha Code

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Question Booklet Sl. No.

Total Number of Questions : 100

Time : 90 Minutes

Maximum Marks : 100

**INSTRUCTIONS TO CANDIDATES**

1. The Question Paper will be given in the form of a Question Booklet. There will be four versions of Question Booklets with Question Booklet Alpha Code viz. **A, B, C & D**.
2. The Question Booklet Alpha Code will be printed on the top left margin of the facing sheet of the Question Booklet.
3. The Question Booklet Alpha Code allotted to you will be noted in your seating position in the Examination Hall.
4. If you get a Question Booklet where the alpha code does not match to the allotted Alpha Code in the seating position, please draw the attention of the Invigilator **IMMEDIATELY**.
5. The Question Booklet Serial Number is printed on the top right margin of the facing sheet. If your Question Booklet is un-numbered, please get it replaced by new Question Booklet with same Alpha Code.
6. The Question Booklet will be sealed at the middle of the right margin. Candidate should not open the Question Booklet, until the indication is given to start answering.
7. Immediately after the commencement of the examination, the candidate should check that the Question Booklet supplied to him/her contains all the 100 questions in serial order. The Question Booklet does not have unprinted or torn or missing pages and if so he/she should bring it to the notice of the Invigilator and get it replaced by a complete booklet with same Alpha Code. This is most important.
8. A blank sheet of paper is attached to the question booklet. This may be used for rough work.
9. **Please read carefully all the instructions on the reverse of the Answer Sheet before marking your answers.**
10. Each question is provided with four choices **(A), (B), (C)** and **(D)** having one correct answer. Choose the correct answer and darken the bubble corresponding to the question number using Blue or Black Ball Point Pen in the OMR Answer Sheet.
11. **Each correct answer carries 1 mark and for each wrong answer 1/3 mark will be deducted. No negative mark for unattended questions.**
12. No candidate will be allowed to leave the examination hall till the end of the session and without handing over his/her Answer Sheet to the Invigilator. Candidates should ensure that the Invigilator has verified all the entries in the Register Number Coding Sheet and that the Invigilator has affixed his/her signature in the space provided.
13. Strict compliance of instructions is essential. Any malpractice or attempt to commit any kind of malpractice in the Examination will result in the disqualification of the candidate.

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1. Which of the following is the time complexity of the given program ?
- ```
void sample (int n)
{
int p,q,r,c=0;
for (p=n/2; p<=n; p++)
for (q=1; q+n/2;q++)
for (r=1; r<=n; r=r*2)
c++;
}
```
- A)  $O(\log n)$                       B)  $O(n \log n)$                       C)  $O(n^2 \log n)$                       D)  $O(n^2)$
2. Which of the following is the correct postfix expression corresponding to the given infix expression ?  $A + B - C * D + (E \wedge F) * G / H / I * J + K$
- A)  $AB + - * CD + \wedge EF / G / H * I J * + K$                       B)  $AB - + C * D + E \wedge F * G / H / I * J K +$   
C)  $AB + - C * D + E \wedge F * G / H / I * J K +$                       D)  $AB + CD * - EF \wedge G * H / I / J * + K +$
3. Which of the following statement(s) is/are not correct about circular queue ?
- I. It provides a quick way to store FIFO data with a maximum size.
  - II. Efficient utilization of the memory.
  - III. In the Round-Robin scheduling algorithm, a circular queue is utilized to maintain processes that are in a ready state.
  - IV. It uses dynamic memory.
- A) I and III                      B) II and IV                      C) IV                      D) II
4. Which of the following statement(s) is/are true relating to linked lists ?
- I. More memory is required in the linked list as compared to an array.
  - II. Direct access to an element is not possible in a linked list as in an array by index.
  - III. There is no need to shift elements after the insertion or deletion of an element only the address present in the next pointer needs to be updated.
- A) Only I and II                      B) Only III                      C) All of the above                      D) None of the above
5. Which among the following statement(s) is/are not correct regarding the properties of the binary trees ?
1. The number of leaf nodes  $l$  in a perfect binary tree, is  $l = (n + 1)/2$ .
  2. A full binary tree with  $l$  leaves has  $2l + 1$  nodes ( $n$ ).
  3. The number of null links (i.e., absent children of the nodes) in a binary tree of  $n$  nodes is  $(n - 1)$
- A) Only 1 and 3                      B) Only 2 and 3                      C) Only 1                      D) Only 2

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6. Consider the following statements about AVL trees :
- I. Searching for a specific key in an AVL tree can be done the same way as that of any balanced or unbalanced binary search tree.
  - II. Once a node has been found in an AVL tree, the next or previous node can be accessed in amortized constant time.
  - III. The retracing can stop if the balance factor becomes (+/-) 1 implying that the height of that sub tree remains unchanged.
- Which among the above statement(s) is/are not correct ?
- A) Only I                      B) Only II and III      C) Only III                      D) All of the above
7. Which of the following is/are correct relating to the possible multiplicity property of MST ?
1. If all the edge weights of a graph are the same, then every spanning tree of that graph is the minimum.
  2. If each edge has a distinct weight then there will be only one, unique minimum spanning tree.
  3. If the weights are positive, then a minimum spanning tree is a minimum cost subgraph connecting all vertices.
- A) Only 1                      B) Only 1 and 2      C) Only 2 and 3              D) Only 3
8. Which of the following statement(s) is/are correct relating to double hashing ?
- a. The interval between probes is fixed (usually 1).
  - b. The interval between probes is increased by adding the successive outputs of a quadratic polynomial to the value given by the original hash computation.
  - c. The interval between probes is computed by a secondary hash function.
- A) All of the above      B) Only a and c      C) Only c                      D) Only a
9. Which of the following are the two key attributes that a problem must have in dynamic programming to be applicable ?
1. Overlapping sub-problems
  2. Non-overlapping sub-problems
  3. Optimal substructure
  4. Divide and Conquer
- A) 1 and 2                      B) 1 and 4                      C) 2 and 3                      D) 1 and 3
10. Which of the following statement(s) is/are correct regarding greedy algorithms ?
- i. The choice made by a greedy algorithm may depend on choices made so far, but not on future choices or all the solutions to the sub-problem.
  - ii. A greedy algorithm never reconsiders its choices.
  - iii. Greedy algorithms produce good solutions to some mathematical problems, but not to others.
- A) Only i                      B) Only ii                      C) All of the above      D) None of the above
11. Which of the following statement(s) is/are correct about MongoDB horizontal scaling ?
- a. It refers to bringing on additional nodes to share the load.
  - b. This allows them to be distributed across nodes more simply, as queries do not have to "join" them together across nodes.
  - c. It refers to increasing the processing power of a single server or cluster.
  - d. It is a good option to try first if massive storage and processing are not required.
- A) Only a and b              B) Only b and c      C) All of the above      D) Only c

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12. Consider the following statements :
- It is a database management system based on the relational model.
  - Entity type refers to the collection of the entity that shares a common definition.
  - Stores data in entities, defined as tables that hold specific information.
  - Stores data as well as methods.
- Which among the above statement(s) is/are correct regarding the OODBMS ?
- A) Only i and ii      B) Only iii      C) Only iv      D) Only ii
13. Which of the following is/are not a concurrency control technique(s) ?
- Locking
  - Time stamping
  - Normalization
  - Optimistic method
- A) All of the above      B) Only a and b      C) Only a      D) Only c
14. Which of the following is not the utility of DBMS ?
- Loading
  - Recovery
  - File organization
  - Backup
- A) Only 1 and 4      B) Only 1 and 3      C) All of the above      D) None of the above
15. Which of the following is used to manipulate Oracle Database structures, including tables ?
- A) Data Definition Language (DDL)      B) Data Manipulation Language (DML)  
C) DML and DDL      D) None of the above
16. Which of the following statements are true about the Third Normal Form (3NF) ?
- Non-prime attributes cannot be transitively dependent.
  - It helps to maintain the integrity of the data.
  - 3NF is sometimes referred to as project-join NF.
- A) All of the above      B) Only 1 and 2      C) Only 2 and 3      D) None of the above
17. Which of the following statement(s) is/are true regarding network model (data model) ?
- The schema, viewed as a graph in which object types are nodes and relationship types are arcs, is not restricted to being a hierarchy or lattice.
  - A method of data modelling that has been defined as “attribute free”, and “fact based”.
  - It is sometimes known as the CODASYL model.
  - A database model based on first-order predicate logic.
- A) Only I and IV      B) Only II and III      C) Only I and III      D) Only II
18. A \_\_\_\_\_ is a stored procedure in a database which automatically invokes whenever a special event in the database occurs.
- A) View      B) Trigger      C) Document store      D) Key-value store

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19. Which of the following statement(s) is/are correct about composite attributes ?
1. An attribute consisting of more than one value for a given entity.
  2. An attribute that can be derived from other attributes of the entity type.
  3. An attribute composed of many other attributes.
  4. An attribute that can be further subdivided into sub-attributes.
- A) Only 1 and 3      B) Only 2      C) Only 3      D) Only 3 and 4
20. Given that W, X, Y, and Z are sets of attributes in a relation R, one can derive several properties of functional dependencies :
- Which among the following represents pseudo-transitive rule ?
- A) If  $X \rightarrow Y$ , then  $XZ \rightarrow YZ$
  - B) If  $X \rightarrow Y$  and  $Y \rightarrow Z$ , then  $X \rightarrow Z$
  - C) If  $X \rightarrow Y$  and  $YW \rightarrow Z$ , then  $XW \rightarrow Z$
  - D) If  $X \rightarrow Y$  and  $Z \rightarrow W$ , then  $XZ \rightarrow YW$
21. Which of the following option leads to the portability and security of Java ?
- A) The applet makes the Java codes secure
  - B) Byte code is executed by JVM
  - C) Dynamic binding between objects
  - D) Use of exception handling
22. Which of the following is/are not the un-conditional control constructs in Python ?
- i. pass
  - ii. break
  - iii. continue
  - iv. quit()
- A) iii only      B) iii and iv only      C) All of the above      D) None of the above
23. Which of the following statement(s) is/are not true regarding Encapsulation ?
- i. The bundling of data with the methods that operate on that data, or the restricting of direct access to some of an object's components.
  - ii. This mechanism is unique to OOP.
  - iii. It can be used to hide data members and member functions.
- A) Only i and ii      B) Only iii      C) Only ii      D) All of the above
24. Which of the following statement(s) is/are not true regarding method overriding ?
- i. It is used to provide the specific implementation of the method that is already provided by its super class.
  - ii. It is an example of run time polymorphism.
  - iii. It is performed within class.
- A) All of the above      B) i and ii      C) ii only      D) iii only

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25. Considering the following statements about compile-time polymorphism, which of the following is/are true ?
- It is also known as static polymorphism.
  - Overloading of methods is called through the reference variable of a class.
  - Compile-time polymorphism is achieved by method overloading and operator overloading.
  - It can be achieved through static binding.
- A) None of the above    B) All of the above    C) Only a and c    D) Only c
26. Which of the following statement(s) relating to interfaces in Java is/are not correct ?
- It is a mechanism of achieving abstraction and multiple inheritances.
  - There can be multiple interfaces in a package.
  - It is not possible to create objects using an interface.
  - There is no constructor in an interface.
- A) i and ii only    B) iv only    C) All of the above    D) None of the above
27. Which of the following statement(s) regarding the exception handling in Java is/are true ?
- It is a mechanism to handle runtime errors.
  - One advantage of the exception handling is to maintain the normal flow of the application.
  - It enables programmers to write robust and fault-tolerant programs.
  - One approach to handle exceptions in Java using try ... catch block.
- A) All of the above    B) a and d only    C) b and d only    D) d only
28. Considering different states of a Thread during its lifetime, which of the following pairs are correctly matched ?
- Running : The processor has given its time to the thread for its execution.
  - Runnable : The thread may be running or may be ready to run at any given instant of time.
  - Waiting : When the thread is prevented from entering into the runnable state and subsequently the running state.
  - Timed Waiting : A thread lies in the waiting state for a specific span of time, and not forever.
- A) 3 and 4    B) 1 and 2    C) 1, 2 and 4    D) 1, 3 and 4
29. Consider the following statements about Java swing
- Swing in Java doesn't support pluggable look and feel.
  - Java swing doesn't follows MVC (Model View Controller).
  - Java swing components are platform-independent.
  - Swing components are lightweight.
- Which among the above statement(s) is/are correct ?
- A) 1 and 2 only    B) 3 and 4 only    C) 1 and 3 only    D) 2 and 4 only

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30. JDBC API uses JDBC drivers to connect with the database, which of the following are the JDBC drivers ?
1. JDBC-ODBC Bridge Driver
  2. Thin Driver
  3. Network Protocol Driver
  4. Native Driver
- A) 1 and 2                      B) 2 and 4                      C) 1, 3 and 4                      D) All of the above
31. Which of the following are the built-in Python data types ?
- a. Sequence types
  - b. Binary types
  - c. Mapping data types
  - d. Set data types
- A) None of the above                      B) All of the above  
C) c and d                      D) b and c
32. Which of the following statement(s) is/are correct regarding list data structure ?
1. A list organizes data values by association with other data values rather than by sequential position.
  2. The logical structure of a list is similar to the structure of a string.
  3. Each of the items in a list is ordered by position.
  4. Each item in a list has a unique index that specifies its position.
- A) 1, 3 and 4                      B) 1, 2 and 4                      C) 2, 3 and 4                      D) All of the above
33. Which of the following are the examples of dictionaries ?
- i. [1980, 1951, 1990]
  - ii. {'Name' : 'Bob', 'Occupation' : 'Manager'}
  - iii. {'Name' : 'Bob', 1 : [1, 2, 3, 4]}
  - iv. [['Welcome', 'You'], ['Bob']]
- A) i, iii and iv                      B) i and iii                      C) ii and iii                      D) None of the above
34. Which of the following parsing library in Python that enables web scraping from HTML and XML documents ?
- A) Scrappy                      B) Seaborn                      C) TensorFlow                      D) BeautifulSoup
35. Which of the following statement is true for when TypeError exception raised ?
1. When a key does not exist in a dictionary.
  2. When two different types are combined.
  3. When the user presses Ctrl+C, Ctrl+Z or Delete.
- A) 1                      B) 2                      C) 3                      D) None of the above
36. A context switch takes place when
- A) The operating system saves the state of one process and loads another
  - B) A process makes a system call
  - C) A hardware interrupt takes place
  - D) A process makes a function call

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37. A Process Control Block (PCB) is
- A) A structure that stores information about a single process
  - B) The kernel's structure for keeping track of all the processes in the system
  - C) A linked list of blocked processes (those waiting on some event)
  - D) A kernel interface for controlling processes (creating, deleting, suspending)
38. Threads within the same process do not share the same
- A) Text segment (instructions)
  - B) Data segment
  - C) Stack
  - D) Open files
39. The disadvantage of round-robin process scheduling is
- A) It gives every process an equal share of the CPU
  - B) It can lead to starvation where some processes never get to run
  - C) It puts a high priority on interactive processes
  - D) It never preempts a process, so a long-running process holds every other process
40. A race condition occurs when
- A) Two or more threads compete to be the first to access a critical section
  - B) The outcome of a program depends on the specific order in which threads are scheduled
  - C) A thread grabs a lock for a critical section, thus preventing another thread from accessing it
  - D) Two threads run in lockstep synchronization with each other
41. Page-based virtual memory is subject to
- A) Internal fragmentation
  - B) External fragmentation
  - C) Both
  - D) Neither
42. A system uses 32-bit logical addresses, a 16K byte page size, and 36-bit physical addresses. What is the size of the page table ?
- A)  $2^{18}$
  - B)  $2^{22}$
  - C)  $2^4$
  - D)  $2^{14}$
43. Memory compaction is a technique to
- A) Free up unused memory in a process to create more free memory
  - B) Remove redundant data in a process so it takes up less space in memory
  - C) Apply real-time data compression to a process' memory to reduce its footprint
  - D) Move a process to a different part of memory to create a larger region of contiguous memory
44. With a direct mapping paging system on a 32-bit processor with 32KB pages, what is the size of each process' page table ?
- A) 32KB
  - B) 64KB
  - C) 128KB
  - D) 4GB

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45. A logical address of 0x514413ab on a 32-bit page-based virtual memory system with 4KB pages has the following offset  
A) 0x3ab                      B) 0x413ab                      C) 0x51441                      D) 0x514
46. Assume that a main memory access takes 100 ns. If we are using a two-level page table and have a 50% TLB hit ratio, the effective memory access time is (assume no memory cache and no page faults)  
A) 100 ns                      B) 200 ns                      C) 300 ns                      D) 400 ns
47. A certain Memory Management Unit (MMU) converts 16-bit virtual address with 512-byte pages into 20-bit physical addresses. How big is the page table ?  
A) 128 entries                      B) 2048 entries                      C) 65536 entries                      D) 1048576 entries
48. Thrashing in a virtual memory system is caused by  
A) A process making too many requests for disk I/O  
B) Multiple processes requesting disk I/O simultaneously  
C) Processes not having their working set resident in memory  
D) Slow operating system response to processing a page fault
49. The wait system call on Linux systems puts a process to sleep until  
A) A semaphore wakes it up  
B) The specified elapsed time expires  
C) A child process terminates  
D) The process is preempted by another process
50. The Linux slab allocator is not designed to  
A) Provide an interface for memory allocation for kernel structures  
B) Avoid external fragmentation by allocating same-size objects per cache  
C) Replace the buddy algorithm for allocating pages as well as objects  
D) Be able to increase the amount of memory it uses by requesting more pages
51. The Address Resolution Protocol (ARP) is used to  
A) Enable a computer to get a unique IP address  
B) Find the IP address that corresponds to a system's domain name  
C) Resolve the path that a packet must take to reach a given IP address  
D) Convert an IP address to the corresponding ethernet address
52. The network device driver is responsible for which layer of the OSI stack ?  
A) Data link layer                      B) Network layer  
C) Transport layer                      D) Presentation layer
53. In the Internet Protocol (IP), a port number is present at the  
A) Network layer                      B) Transport layer  
C) Presentation layer                      D) Application layer

54. TCP/IP differs from UDP/IP in that TCP/IP
- A) Requires the use of port numbers
  - B) Detects errors in a packet
  - C) Provides guaranteed bandwidth
  - D) Provides in-order packet delivery to the application
55. In the OSI Reference Model, what is the purpose of the Transport layer ?
- A) Conversion of data into a machine-independent representation
  - B) Routing packets from one machine to another, possibly through routers
  - C) Providing end-to-end communication services for applications
  - D) Transferring packets from one machine to another within a physical local area network
56. Which is true about the Transport Control Protocol (TCP) ?
- A) It provides datagram (connectionless) service
  - B) It sends an acknowledgment for each packet received
  - C) It permits incoming data to arrive out of sequence
  - D) It was designed for Ethernet networks
57. Given are the following subnet addresses:  
X : 192.168.128.0/22 Y : 192.168.136.0/22 Z : 192.168.142.0/22  
Which of the following statements is true ?
- A) 192.168.132.1 and 192.168.146.1 are not in the IP range of any of the 3 subnets
  - B) 192.168.132.1 is in the range of X, and 192.168.146.1 is in the range of Z
  - C) 192.168.132.1 is in the range of Y, and 192.168.146.1 is in the range of Z
  - D) 192.168.132.1 is not in the IP range of any of the 3 subnets, and 192.168.146.1 is in the range of Z.
58. A typical router in the core of the Internet has
- A) Multiple network interfaces, each with its own IP address
  - B) Buffers to hold a queue of packets at input or output ports
  - C) A scheduling algorithm to determine which queued packet goes next
  - D) All of the above
59. The Internet Control Message Protocol (ICMP) is used by
- A) Web and email applications
  - B) FTP and email applications
  - C) SNMP and NTP
  - D) Ping and traceroute
60. In a Class B IP address like 136.159.5.20, the network ID portion is
- A) 8 bits long
  - B) 16 bits long
  - C) 24 bits long
  - D) 32 bits long
61. In Classless Inter-Domain Routing (CIDR), the network ID in an IPv4 address is
- A) Always 8 bits long
  - B) Always 16 bits long
  - C) Always 24 bits long
  - D) None of the above

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62. Which one of the following IP addresses is a private IP address ?  
A) 10.13.159.125      B) 172.186.11.21      C) 244.244.244.244      D) 11.189.11.21
63. The typical Maximum Segment Size (MSS) for TCP on the Internet is  
A) 64 bytes              B) 1024 bytes              C) 1460 bytes              D) 1500 bytes
64. The new feature(s) in IPv6 compared to IPv4 is/are  
A) 128-bit IP addresses  
B) Removing the need for IP datagram fragmentation  
C) Better support for Quality of Service (QoS), mobility, and security  
D) All of the above
65. The Domain Name Service (DNS) is an example of a  
A) Transaction-oriented application-layer protocol  
B) Session-oriented application-layer protocol  
C) Transaction-oriented transport-layer protocol  
D) Session-oriented transport-layer protocol
66. As part of requirement analysis, customer is getting a chance to use the product before it is finally implemented. Which of the following software process model follows this concept ?  
A) Waterfall model                                      B) Spiral model  
C) Prototyping model                                      D) None of the above
67. Which of the following is not an Object Oriented methodology for Software design ?  
A) Data flow diagram                                      B) Use case diagram  
C) Sequence diagram                                      D) Collaboration diagram
68. Which of the following International Standards Organization's (ISO) standard is applicable for software product development ?  
A) ISO 14000              B) ISO 31000              C) ISO 9001              D) ISO 26000
69. \_\_\_\_\_ testing verifies whether the software meeting functionalities and not checking the implementation details.  
A) White box              B) Black box              C) Integration              D) None of the above
70. Which of the following is false when calculating cyclomatic complexity,  $V(G)$ , for a flow graph  $G$  ?  
A) The number of regions  
B)  $V(G) = E - N + 2$ , where  $E$  is the number of edges and  $N$  is number of nodes  
C)  $V(G) = P + 1$ , where  $P$  is the number of predicate nodes  
D) The number of conditions

71. Which of the following is a system testing done among the small group of customers ?  
A) Alpha testing      B) Beta testing      C) Stress testing      D) None of the above
72. Which of the following is not a level of Capability Maturity Model developed by Software Engineering Institute of Carnegie Mellon University ?  
A) Optimizing      B) Repeatable  
C) Verifiable      D) Defined
73. Which of the following PHP function converts 100.56 to 100 ?  
A) ceil( )      B) floor( )      C) round( )      D) fmode( )
74. AJAX stands for  
A) Advanced Java and XML      B) Applied JSP and XML  
C) Asynchronous Java and XML      D) None of the above
75. Which one of the following is another name of Javascript ?  
A) ECMAScript      B) VBScript      C) ASP      D) PHP
76. \_\_\_\_\_ is a text based protocol and uses XML based rule to allow applications interchange information over HTTP.  
A) IIOP      B) TCP      C) JRMP      D) SOAP
77. From the following statements, related to XML syntax, which one is false ?  
A) XML tags are not case sensitive  
B) XML attribute values must be quoted  
C) XML documents must have a starting tag and closing tag  
D) XML must have a Root element and only one Root element
78. Which of the following is not datatype in JSON ?  
A) Object      B) String      C) Enumeration      D) Array
79. Node.js is not advisable to use for  
A) Data processing applications      B) Real time system applications  
C) CPU intensive applications      D) None of the above
80. What is the starting of all jQuery selectors?  
A) <>      B) #:      C) \$( )      D) ?!
81. The use of technologies such as fingerprint, retina and iris scans to authenticate the individuals requesting access to resource is called  
A) Access control      B) Micromeric      C) Biometric      D) Audit trail

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82. The DES algorithm is an example of what type of cryptography ?  
 A) Symmetric key                                                                B) Asymmetric key  
 C) Public key                                                                                D) None of the above
83. Which of the following is not a cryptographic algorithm that uses hashing function ?  
 A) SHA-1                                                                                        B) MD5                                                                                        C) AES                                                                                        D) None of the above
84. Which one of the following quality is most affected by Denial of Service (DoS) attack ?  
 A) Confidentiality                                                                                B) Integrity                                                                                        C) Availability                                                                                        D) Robustness
85. \_\_\_\_\_ is a network authentication protocol designed to provide authentication for client/server applications by using symmetric key cryptography.  
 A) Brute Force                                                                                        B) Trojan Horses                                                                                        C) IPSec                                                                                        D) Kerberos
86. The Secure Shell (SSH) operates at the \_\_\_\_\_ of the OSI reference model.  
 A) Transport Layer                                                                                        B) Application Layer  
 C) Session Layer                                                                                        D) Network Layer
87. Which one of the following is not a VPN protocol ?  
 A) Point to Point Tunneling Protocol (PPTP)  
 B) Internet Message Access Protocol (IMAP)  
 C) Secure Sockets Layer (SSL)  
 D) Internet Protocol Security (IPSec)
88. What is the port number used by HTTPS ?  
 A) 80                                                                                                        B) 53                                                                                                        C) 25                                                                                                        D) 443
89. Which encryption algorithm is used by WPA2 for securing wireless networks ?  
 A) SHA-1                                                                                                        B) MD5                                                                                                        C) AES                                                                                                        D) None of the above
90. The PGP stands for  
 A) Pretty Good Privacy                                                                                        B) Pretty Good Protocol  
 C) Point Grid Protocol                                                                                        D) None of the above
91. Which one of the following is a private cloud ?  
 A) Amazon Web Services                                                                                        B) Google AppEngine  
 C) Microsoft Azure                                                                                        D) Nebula
92. Google AppEngine is an example of  
 A) PaaS                                                                                                        B) SaaS                                                                                                        C) Daas                                                                                                        D) IaaS

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93. The characteristic of a software program that enables an instance of the program to serve different consumers where by each is isolated from other is referred to as
- A) Elasticity
  - B) Multitenancy
  - C) Resiliency
  - D) Ubiquitous access
94. \_\_\_\_\_ are system level messages exchanged between hypervisors, hypervisor and virtual services and hypervisor and Virtualized Infrastructure Managers (VIMs).
- A) On demand usage
  - B) Resource Pooling
  - C) Heartbeats
  - D) None of the above
95. What does the acronym CAP stands for, in the CAP theorem of Distributed Systems ?
- A) Consistency Availability Partition tolerance
  - B) Confidentiality Availability and Portability
  - C) Confidentiality Availability and Persistent
  - D) Consistency Availability Portability
96. A popular non-relational cloud database
- A) MongoDB
  - B) Amazon RDS
  - C) SQL Assure
  - D) None of the above
97. \_\_\_\_\_ is a mainframe operating system which allows other operating system to run on the same system concurrently and monitor access of virtual machines.
- A) Client
  - B) Server
  - C) Hypervisor
  - D) Monitor
98. \_\_\_\_\_ is a Apache project which uses MapReduce programming model of cloud computing.
- A) Skynet
  - B) Hadoop
  - C) Grid Grain
  - D) Disco
99. Blockchain can refer to
- A) Peer-to-peer networking
  - B) Asymmetric cryptography
  - C) Cryptographic hashing
  - D) All of the above
100. \_\_\_\_\_ is a technology for building apps and organizations, holding assets, transacting and communicating without being controlled by a central authority.
- A) Bitcoin
  - B) Ethereum
  - C) Stablecoin
  - D) None of the above
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Space for Rough Work

