

12/2014

1. The term push and pop is related to the :
(A) Linked list (B) Stack (C) Queue (D) Array
2. Binary search algorithm cannot be applied to :
(A) Sorted linked list (B) Sorted binary trees
(C) Sorted linear array (D) Pointer array
3. A data structure where elements can be added or removed at either end but not in the middle :
(A) Linked lists (B) Stacks
(C) Queues (D) Dequeue
4. Let P and Q be propositions. The proposition $P \wedge Q$ is called _____.
(A) Conjunction of P and Q (B) Disjunction of P and Q
(C) Negation of P and Q (D) None of the above
5. A proposition $P(P, Q, \dots)$ is a tautology, the truth table contain in the last column is _____.
(A) P (B) T (C) F (D) Q
6. A formula consisting of conjunction of the max terms only is known as :
(A) Principle conjunctive normal form
(B) Principle disjunctive normal form
(C) Conjunctive normal form
(D) Disjunctive normal form
7. Paging is :
(A) Virtual memory (B) Memory management scheme
(C) Allocation of memory (D) Deadlock prevention scheme
8. Round robin scheduling algorithm falls under the category of :
(A) Preemptive scheduling
(B) Non preemptive scheduling
(C) Sometimes preemptive sometimes non preemptive
(D) None of these

9. High paging actually is called :
(A) Segmentation (B) Demand paging
(C) Thrashing (D) Scheduling
10. MAN refers to :
(A) Mega Area Network (B) Metropolitan Area Network
(C) Mini Area Network (D) Medium Area Network
11. Which of the following layer is **not** in OSI model ?
(A) Physical layer (B) Internet layer (C) Network layer (D) Transport layer
12. Collection of interconnected networks sometimes called :
(A) Internet (B) Wireless Network
(C) Mobile Network (D) None of these
13. The most important feature of spiral model is :
(A) Requirement analysis (B) Risk management
(C) Quality management (D) Configuration management
14. The worst type of coupling is :
(A) Data coupling (B) Control coupling
(C) Stamp coupling (D) Content coupling
15. All the modules of the system are integrated and tested as complete system in the case of :
(A) Bottom up testing (B) Top-down testing
(C) Sandwich testing (D) Big-Bang testing
16. Artificial intelligence is the study of ideas which enable computers to do the things that make people seem intelligent. This commonly uses definition of AI is quoted by :
(A) Alan Turing (B) Patrick Henry Winston
(C) Bill Gates (D) Patrick Thomson Knight
17. The imitation game was developed by _____ to demonstrate a computer intelligence.
(A) Bill gates (B) Henry Charles Patrick
(C) Alan Turing (D) None of the above
18. AI research was started by which country :
(A) India (B) America (C) UK (D) Japan

19. Which of the following Algorithms belongs to symmetric encryption ?
 (A) Triple DES (B) RSA (C) KC triple (D) IDEAL 5
20. Which is the largest disadvantage of the symmetric Encryption :
 (A) More complex and therefore more time-consuming calculations
 (B) Problem of the secure transmission of the Secret Key
 (C) Less secure encryption function
 (D) All the above
21. The _____ attack can endanger the security of the Diffie-Hellman method if two parties are not authenticated to each other.
 (A) Man-in-the-middle (B) Cipher text attack
 (C) Plain text attack (D) None of the above
22. The complexity of Bubble sort algorithm is :
 (A) $O(n)$ (B) $O(\log n)$ (C) $O(n^2)$ (D) $O(n \log n)$
23. The minimum number of edges in a connected graph on n vertices is :
 (A) N (B) $N + 1$
 (C) $N - 1$ (D) None of the above
24. Which of the following algorithm solves the all pair shortest path problem ?
 (A) Dijkstra's algorithm (B) Floyd's algorithm
 (C) Prim's algorithm (D) Warshall's algorithm
25. Let A and B be two sets. If every elements of A is an element of B , the A is called :
 (A) Subset of B (B) Union of B
 (C) Equal of B (D) None of the above
26. Hasse diagrams are drawn for :
 (A) Boolean algebra (B) Lattices
 (C) Partially ordered set (D) None of the above
27. Number of subsets of a set of order three is :
 (A) 5 (B) 8 (C) 12 (D) 6

28. The number of processes completed per unit time is known as :
(A) Output (B) Throughput (C) Efficiency (D) Capacity
29. Fork is :
(A) Dispatching of a task (B) Creation of a new job
(C) Creation of a new process (D) Increasing the priority of a task
30. System cannot boot if it does not have :
(A) Compiler (B) Loader
(C) Assembler (D) Operating System
31. HTTP refers to :
(A) Hyper Text Transfer Protocol (B) Hyper Text Transformation Protocol
(C) Hyper Text Tie Protocol (D) None of these
32. Asynchronous Transfer Mode is fundamentally a _____ technology.
(A) Circuit switching (B) Packet switching
(C) Narrow band (D) None of these
33. Which of the following is **not** a type of Computer Network ?
(A) Local Area Network (B) Personal Area Network
(C) Remote Area Network (D) Metropolitan Area Network
34. _____ are based on a biological metaphor.
(A) BFS algorithm (B) DFS algorithm
(C) Genetic algorithm (D) Best first algorithm
35. The traditional AI techniques still used today include all of the following except :
(A) Searching (B) Pattern recognition
(C) Parallel processing (D) Heuristics
36. A primary outcome of the automatic language translation program was the realization that :
(A) Human are faster and more accurate
(B) Computer are faster and more accurate
(C) Computers make fewer errors than humans
(D) Computers can accurately translate 99% of the text

37. Paging suffers from _____ Fragmentation.
(A) External (B) Internal (C) Physical (D) All of the above
38. _____ is the science and art of transforming messages to make them secure and immune to attacks.
(A) Cryptography (B) Cryptanalysis (C) Cryptology (D) All the above
39. A mathematical model with a collection of operations defined on that model is called :
(A) Data Structure (B) Primitive Data Type
(C) Abstract Data Type (D) Algorithm
40. Which of the following abstract data type can be used to represent a many to many relation ?
(A) Tree (B) Graph
(C) Array (D) None of the above
41. Which of the following data structure can't store the non-homogeneous data elements ?
(A) Arrays (B) Records (C) Pointers (D) None
42. A program in execution is called :
(A) Process (B) Instruction (C) Procedure (D) Function
43. The primary purpose of the operating system is :
(A) To make the most efficient use of the computer hardware
(B) To allow people to use the computer
(C) To keep systems programmers employed
(D) To make computers easier to use
44. Light weight process is called _____.
(A) Thread (B) Process
(C) Fork (D) None of the above
45. Virtual memory is commonly implemented by _____.
(A) Paging (B) Segmentation
(C) Semaphore (D) Demand Paging

46. In a tree between every pair of vertices there is :
- (A) Exactly one path (B) A self-loop
(C) Two circuit (D) N number of paths
47. $P \vee 7P =$ _____.
- (A) F (B) T (C) P (D) 7P
48. Traversing a binary tree first root and then left and right subtrees called _____ traversal.
- (A) Preorder (B) Inorder (C) Postorder (D) None of the above
49. A graph with no edges is known as empty graph. Empty graph is also known as :
- (A) Regular graph (B) Trivial graph
(C) Monograph (D) None of the above
50. Switch is a Device of _____ Layer of OSI Model.
- (A) Network (B) Data Link (C) Application (D) Session
51. Wi-Fi technology refers to :
- (A) Wireless LAN connections
(B) Wires connecting a computer to the Internet
(C) A drive on a laptop that connects to the Internet
(D) The bandwidth of the server to which a laptop connects
52. Software engineering aims at developing :
- (A) Reliable Software
(B) Cost Effective Software
(C) Reliable and Cost Effective Software
(D) None of the above
53. The feature of the object oriented paradigm which helps code reuse is :
- (A) Object (B) Class (C) Inheritance (D) Aggregation

54. Alpha and Beta Testing are forms of :
- (A) Acceptance testing (B) Integration testing
(C) System testing (D) Unit testing
55. PROLOG is an AI programming language which solves problems with a form of symbolic logic known as predicate calculus. It was developed in 1972 at the University of Marseilles by a team of specialists. Can you name the person who headed this team ?
- (A) Alain Colmerauer (B) Nicklaus Wirth
(C) Seymour Papert (D) John McCarthy
56. The original LISP machines produced by both LMI and Symbolic were based on research performed at :
- (A) CMU (B) MIT (C) RAMD (D) Standford university
57. SRS is also known as specification of :
- (A) White box testing (B) Stress testing
(C) Integrated testing (D) Black box testing
58. The operating system manages :
- (A) Memory (B) Processor
(C) Disk and IO devices (D) All of the above
59. PMTLR stands for :
- (A) Page Map Table Limit Register
(B) Page Memory Table With Limit Register
(C) Page Main Table Load Register
(D) Page Memory Time Load Register
60. The postfix notation of $A*B + C/D$ is :
- (A) $A B * C D / +$ (B) $A * B C + / D$
(C) $* A B / C D +$ (D) $A B D C * / +$
61. $P \rightarrow Q =$ _____
- (A) $\neg P \vee Q$ (B) $P \vee \neg Q$ (C) $\neg P \vee \neg Q$ (D) None

62. Which of the following TCP/IP protocol is used for transferring electronic mail messages from one machine to another ?
(A) FTP (B) SNMP (C) SMTP (D) RPC
63. Bankers algorithm for resource allocation deals with :
(A) Deadlock prevention (B) Deadlock avoidance
(C) Deadlock recovery (D) Mutual exclusion
64. Which phase is **not** available in software life cycle ?
(A) Coding (B) Testing (C) Maintenance (D) Abstraction
65. Which of the items listed below is **not** one of the software engineering layers ?
(A) Process (B) Manufacturing (C) Methods (D) Tools
66. Which of the following IP address class is Multicast ?
(A) Class B (B) Class A (C) Class C (D) Class D
67. The testing that focuses on the variables is called :
(A) Black box testing (B) White box testing
(C) Data variable testing (D) Data flow testing
68. The Commands used to compare the files is known as :
(A) comp (B) du (C) cmp (D) ccp
69. An AI technique that allows computers to understand associations and relationships between objects and events is called :
(A) Heuristic processing (B) Cognitive science
(C) Relative symbolism (D) Pattern matching
70. Which of the following command is used with vi editor to delete a single character ?
(A) z (B) y (C) a (D) x

71. Which language is used in the areas of pattern recognition, artificial intelligence and for simulation of games ?
 (A) APL (B) FORTRAN (C) LISP (D) CORAL
72. Conversion of an octal number 20 to its binary number is :
 (A) 10000 (B) 10100 (C) 11110 (D) 11001
73. The OR, XOR and AND functions can be performed by _____ of the computer in a CPU :
 (A) Register (B) CPU (C) ALU (D) All of the above
74. UDP stands for :
 (A) Useful Data Protocol (B) User Datagram Protocol
 (C) Used Data Protocol (D) None of these
75. IP address range for Class C :
 (A) 128.1.0.1 to 191.255.254.254 (B) 192.0.0.0 to 223.255.255.255
 (C) 192.1.1.1 to 223.255.255.255 (D) 192.0.1.1. to 223.255.254.254
76. Translator for low level programming language were termed as :
 (A) Linker (B) Compiler (C) Loader (D) Assembler
77. Analysis which determines the meaning of a statement once its grammatical structure becomes known is termed as :
 (A) Regular Analysis (B) General Analysis
 (C) Semantic Analysis (D) Syntax Analysis
78. In break-even analysis we assume :
 (A) Non-linear relationships
 (B) Linear relationships
 (C) Diminishing returns to the variable factors of production
 (D) Non-proportional relationships