

042/2016

Maximum : 100 marks

Time : 1 hour and 15 minutes

1. How many instances of an abstract class can be created?
(A) 1 (B) 4
(C) 10 (D) 0
2. Which of the following is the 2's compliment of 1011?
(A) 1010 (B) 0101
(C) 1100 (D) 0111
3. Which of the following commands is used to update access and modification?
(A) grep (B) wc
(C) touch (D) cat
4. A high speed device used in CPU for temporary storage during processing is called :
(A) A Register (B) A Bus
(C) A Data bus (D) All of the above
5. Which of the following statement is correct?
(A) Base class pointer cannot point to derived class
(B) Derived class pointer cannot point to base class
(C) Pointer to derived class cannot be created
(D) Pointer to base class cannot be created
6. Bottom up parsing involves :
(A) Shift reduce (B) Handle Pruning
(C) Operator check (D) (A) and (B)
7. Which of the following cannot be friend?
(A) Function (B) Class
(C) Object (D) Operator Function

8. Which is a valid keyword in Java?
- (A) Interface (B) String
(C) Float (D) Unsigned
9. The average time necessary for the correct sector of a disk to arrive at the read write head is :
- (A) Down time (B) Seek time
(C) Latency time (D) Access time
10. Type checking is normally done during :
- (A) Lexical analysis (B) Syntax Analysis
(C) Code Generation (D) Syntax directed translation
11. Which command is used to remove a file?
- (A) remove (B) rm
(C) mv (D) del
12. Which of the following is considered as DBMS?
- (A) Foxpro (B) Oracle
(C) MS Access (D) All of the above
13. Which of the following is not a type of constructor?
- (A) Copy constructor (B) Friend Constructor
(C) Default Constructor (D) Parameterized Constructor
14. Applying De Morgan's theorem to the expression $\overline{A+B+C+D}$:
- (A) $\overline{A} \overline{B} \overline{C} \overline{D}$ (B) $A+B+C+D$
(C) $A+B+C+D$ (D) $A+B+C+D$
15. Which of the following System software resides in the main memory always?
- (A) Text Editor (B) Assembler
(C) Linker (D) Loader
16. When was Apple Macintosh II micro computer introduced in the market?
- (A) 1964 (B) 1970
(C) 1983 (D) 1986

17. FDDI is a :
- (A) Ring Network (B) Mesh Network
(C) Star Network (D) Bus Network
18. Which command is used to display the top of the file?
- (A) Cat (B) Head
(C) More (D) Grep
19. Which of the following device is used to connect two systems, especially if the systems use different protocols?
- (A) Hub (B) Bridge
(C) Gateway (D) Repeater
20. EBCDIC can code up to how many different characters :
- (A) 8 (B) 32
(C) 64 (D) 256
21. Which 32-bit microprocessor is used in IBM's PS/2 model-80 computer?
- (A) 8088 (B) 80286
(C) 80386 (D) 80486
22. The Boolean expression $X = A + B + C +$ is logically equivalent to what single gate :
- (A) NAND (B) NOR
(C) AND (D) OR
23. What php stands for?
- (A) Pre Hypertext processor (B) Hyper text Preprocessor
(C) Pre Hyper processor (D) Pre Hyper text process
24. Which of the following statement is correct?
- (A) Class is an instance of object (B) Object is an instance of a class
(C) Class is an instance of data type (D) Object is an instance of data type
25. Which of the following is an abstract data type?
- (A) Int (B) Double
(C) String (D) Class

26. Which of the following is the address of the router?
(A) The IP address (B) The TCP address
(C) The subnet mask (D) The default gateway
27. The _____ layer is the layer closest to the transmission medium.
(A) Transport (B) Network
(C) Physical (D) Datalink
28. ASCII stands for :
(A) All purpose Scientific Code for Information Interchange
(B) American Standard Code for Information Interchange
(C) American Security Code for Information Interchange
(D) American Scientific Code for Information Interchange
29. 1024 Kilobytes represent a :
(A) 1 MB (B) 1GB
(C) 1KB (D) None of these
30. The ASCII code for the character J is :
(A) 1001 0001 (B) 1001 1010
(C) 0100 1010 (D) 1010 0001
31. Which of the following is not a function of DBA?
(A) Network maintenance (B) Routine Maintenance
(C) Schema Definition (D) Authorization for data access
32. 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) Load and Go
33. The software used to convert source program instructions to object instruction is known as :
(A) Compiler (B) Assembler
(C) Interpreter (D) Language Processor

34. To copy the hidden system files of DOS to another disk you can use the command :
- (A) Copy (B) Ren
(C) Sys (D) Diskcopy
35. Which of the following is a group of one or more attributes that uniquely identifies a row?
- (A) Key (B) Domain
(C) Tuple (D) Relation
36. A full binary tree with $2n + 1$ nodes contain :
- (A) n leaf nodes (B) n non leaf nodes
(C) $n - 1$ leaf nodes (D) $n - 1$ non leaf nodes
37. What does Belady's Anomaly related to?
- (A) Page Replacement Algorithm (B) Memory Management Algorithm
(C) Deadlock prevention Algorithm (D) Disk scheduling Algorithm
38. In Which year the first operating system was developed :
- (A) 1910 (B) 1940
(C) 1950 (D) 1980
39. The geostationary satellite used for communication systems :
- (A) Rotates with the earth
(B) Remains stationary relative to the earth
(C) Is positioned over equator
(D) All of the above
40. What is the port number of POP3?
- (A) 80 (B) 110
(C) 90 (D) 49
41. A relation is in this form if it is in BCNF and has no multivalued dependencies :
- (A) Second normal form (B) Third normal form
(C) Fourth normal form (D) Domain/Key normal form
42. Who programmed the first computer game spacewar in 1962?
- (A) Steel Russell (B) Konard Zuse
(C) Alan Emtage (D) Tim Berners-lee

43. Which access method is used for obtaining a record from a cassette tap?
- (A) Direct (B) Sequential
(C) Random (D) All of the above
44. A technique for direct search is :
- (A) Binary search (B) Linear search
(C) Tree Search (D) Hashing
45. The postfix form of the expression :
 $(A + B) * (C * D - E) * F / G$ is
- (A) $AB + CD * E - FG / **$ (B) $AB + CD * E - F ** G /$
(C) $AB + CD * E - * F * G /$ (D) $AB + CDE * - * F * G /$
46. What does PPTP stands for?
- (A) Point to Point Transmission Protocol (B) Point to Point Transfer Protocol
(C) Point to Point Tunneling Protocol (D) Point to Point Traffic Protocol
47. Which of the following statement is correct?
- (A) C++ allows static type checking
(B) C++ allows dynamic type checking
(C) C++ allows static member function be of type const
(D) Both (A) and (B)
48. Which is a reserved word in the Java programming language?
- (A) method (B) native
(C) reference (D) subclass
49. The communication mode that supports two-way traffic but only one direction at time is :
- (A) Simplex (B) Duplex
(C) halfduplex (D) multiplex
50. What is thrashing?
- (A) A high paging activity is called thrashing
(B) A high executing activity is called thrashing
(C) A extremely long process is called thrashing
(D) A extremely long virtual memory is called thrashing

51. Linux Torvalds develop which operating system :
- (A) Windows (B) Mac OS
(C) UNIX (D) Linux
52. Which operating system is developed and used by Apple Inc?
- (A) Windows (B) Android
(C) iOS (D) UNIX
53. Which one is the current fastest super computer in India?
- (A) Param Padma (B) SAGA-220
(C) PARAM YUVA II (D) EKA
54. Which of the following concepts means wrapping up of data and functions together?
- (A) Abstraction (B) Encapsulation
(C) Inheritance (D) Polymorphism
55. One solution to the multivalued dependency constraint problem is to :
- (A) Split the relation into two relations each with a single theme
(B) Change the theme
(C) Create a new theme
(D) Add a composite key
56. Which of the following algorithm solves the all pair shortest path problem?
- (A) Floyd's algorithm (B) Warshall's algorithm
(C) Prim's algorithm (D) Dijkstra's algorithm
57. Which of the following is an invalid visibility label while inheriting a class?
- (A) Public (B) Private
(C) Protected (D) friend
58. What does SSL stands for?
- (A) System Socket Layer (B) Secure System Login
(C) Secure Socket Layer (D) Secure System Layer
59. What hardware architectures are not supported by Red Hat?
- (A) SPARC (B) IBM-COMPATIBLE
(C) Alpha (D) Macintosh

60. How many types of Polymorphisms are supported by C++?
(A) 1 (B) 2
(C) 3 (D) 4
61. Which address is the loop back address?
(A) 0.0.0.1 (B) 127.0.0.0
(C) 127.0.0.1 (D) 255.255.255.255
62. Process are classified into different groups in :
(A) Multilevel queue scheduling algorithm (B) Priority scheduling algorithm
(C) Round robin scheduling algorithm (D) Shortest job scheduling algorithm
63. Which keys can be used to pressed quit without saving in DOS?
(A) Ctrl + A (B) Ctrl + B
(C) Ctrl + D (D) Ctrl + C
64. The OS of a computer may periodically collect all the free memory space to form continuous block of free space. This is called :
(A) Garbage collection (B) Concatenation
(C) Collision (D) Dynamic Memory Allocation
65. Who was the father of Punched Card processing?
(A) J. Presper Eckert (B) Charles Babbage
(C) Dr. Herman Hollerith (D) Blaise Pascal
66. What is the usual number of bits transmitted simultaneously in parallel data transmission used by microcomputers?
(A) 16 (B) 9
(C) 8 (D) 4
67. India's first super computer param 8000 was installed in :
(A) 1988 (B) 1982
(C) 1995 (D) 1991
68. The number of interchanges required to sort 5, 1, 6, 2, 4 in ascending order using Bubble sort is :
(A) 6 (B) 5
(C) 7 (D) 8

69. Modem is used data transmission when was it invented and in which country :
- (A) 1963, USA (B) 1965, Germany
(C) 1950, USA (D) 1950, Japan
70. In Php variable name starts with :
- (A) ! (B) &
(C) # (D) \$
71. The person contributes the idea of the stored program was :
- (A) Charles Babbage (B) Howard Aiken
(C) Jon Von Neuman (D) Winton Cerf
72. Father of Java programming language :
- (A) Dennis Richi (B) James Goslin
(C) Simer Crey (D) James Russel
73. A semaphore :
- (A) Is a binary mutex
(B) Must be accessed from only one process
(C) Can be accessed from multiple process
(D) None of these
74. In OSI model, which of the following layer provides error-free delivery of data :
- (A) Data link (B) Network
(C) Transport (D) Session
75. Which of the following is not a level of data abstraction?
- (A) Physical layer (B) Critical level
(C) Logical level (D) View level
76. ISP exchanges internet traffic between their networks by :
- (A) Internet exchange point (B) Subscriber end point
(C) ISP end point (D) None of the above
77. What are the most commonly used transmission speeds in BPS used in data communication?
- (A) 300 (B) 1200
(C) 2400 (D) 9600

78. The average successful search time for sequential search on 'n' items is :
- (A) $n/2$ (B) $\frac{(n-1)}{2}$
 (C) $\frac{(n+2)}{2}$ (D) $\log(n)+1$
79. Which of the following is a data model?
- (A) Entity-Relationship model (B) Relational data model
 (C) Object-Based data model (D) All of the above
80. What is the default subnet mask for a class A network?
- (A) 127.0.0.1 (B) 255.0.0.0
 (C) 255.255.255.0.0 (D) 255.255.255.0
81. From where have been Indian constitution inspired the idea of federal government with a strong centre and a different State government?
- (A) Constitution of Canada (B) Constitution of USA
 (C) Constitution of Britain (D) Constitution of Australia
82. Out of 543 elected Lok Sabha members, how many members represented the Union Territories?
- (A) 8 (B) 10
 (C) 15 (D) 20
83. In which year NOTA (None of the above) implemented in India?
- (A) 2010 (B) 2012
 (C) 2013 (D) 2014
84. "The spirit of democracy is not a mechanical think to be adjusted by abolition of form. It required change of heart"- Who says this?
- (A) Abraham Lincoln (B) Mahatma Gandhi
 (C) Rabindranath Tagore (D) Subhas Chandra Bose
85. Which parliamentary committee in India is normally chaired by a prominent member of the opposition?
- (A) Privileges Committee
 (B) Estimates Committee
 (C) Public Accounts Committee
 (D) Committee on Government Assurances

86. National Food Security Mission (NFSM) launched in the year :
- (A) 2008 (B) 2005
(C) 2010 (D) 2007
87. Which of the following is the scheme for Prevention of Trafficking and Rescue, Rehabilitation and Re-integration of Victims of Trafficking for Commercial Sexual exploitation?
- (A) Ujjawala
(B) Swadhar
(C) Kishori Sakthi Yojana
(D) Integrated Child Development Services
88. Right to Information Act (RTI) passed in the year :
- (A) 2004 (B) 2005
(C) 2007 (D) 2008
89. Which of the following award is given for Individual's working for child welfare?
- (A) Kishori Shakthi Yojana (B) Vayoshreshtha Samman Award
(C) Rajeev Gandhi Manav Seva Award (D) None of the above
90. The Food for Work programme was renamed as :
- (A) Rural Landless Employment Guarantee Programme (RLEGP)
(B) Integrated Rural Development Programme (IRDP)
(C) Jawahar Rozgar Yojana (JRY)
(D) National Rural Employment Programme (NREP)
91. "Yachana Yathra" to enable the poor children to get educated was led by :
- (A) A.K. Gopalan (B) V.T. Bhattathirippad
(C) K. Kelappan (D) T.K. Madhavan
92. Who is known as the Jhansi of Travancore?
- (A) Arya Pallam (B) Anna Chandi
(C) Lalitha Prabhu (D) Akkamma Cheriyan
93. Which organisation led Kalpathi Revolt?
- (A) Sahodarasangham (B) SNDP
(C) Aryasamaj (D) Yogakshemasabha

94. The prefix of "Mahakavi" awarded to Kumaranasan by Madras University in the year :
(A) 1922 (B) 1918
(C) 1924 (D) 1920
95. In which temple Sree Narayana Guru installed mirror?
(A) Aruvippuram (B) Karamukku
(C) Sivagiri (D) Kalavamkodam
96. Who won the Nobel Prize in literature in 2015?
(A) Patric Modiano (B) Svetlana Alexievich
(C) Alice Munro (D) Mo Yan
97. India's first space research observatory ASTROSAT successfully launched in to the orbit from Sreeharikota :
(A) 2015 September 25 (B) 2015 September 30
(C) 2015 September 28 (D) 2015 September 27
98. Who is the brand ambassador of the programme "Pradhan Mantri Jan-Dhan Yojana"?
(A) Shahrukh Khan (B) Amitabh Bachchan
(C) Shilpa Shetty (D) Ankit Fadia
99. Who painted "The Potato Eaters"?
(A) Picasso (B) Leonardo da Vinci
(C) Vincent Van Gogh (D) Raja Ravi Varma
100. Gandhiji learned about civil disobedience movement from :
(A) Hermann Kallenbach (B) Henry David Thoreau
(C) Martin Luther King (D) Leo Tolstoy