## 147/2023

Maximum : 100 marks
Time : 1 hour and 30 minutes

1. For pairing Bluetooth devices, it needs :
(A) Keyword
(B) Keycode
(C) Passcode
(D) Password
2. Name the electronic component used in second generation computer?
(A) Transistors
(B) Vacuum tubes
(C) Large scale integrated circuits
(D) Small scale integrated circuits
3. VGA connector is used to connect :
(A) Printer
(B) Monitor
(C) Speaker
(D) Keyboard
4. The internal power supply of a CPU is referred as :
(A) CVT
(B) UPS
(C) SMPS
(D) Stabilizer
5. A computer program that converts an entire program into machine language at one time is called as a/an :
(A) Interpreter
(B) CPU
(C) Compiler
(D) Simulator
6. Windows OS is a product of :
(A) IBM
(B) Apple
(C) Google
(D) Microsoft
7. What is the shortcut key to open file explorer?
(A) Windows button +E
(B) Alt + E
(C) Shift + E
(D) $\quad \mathrm{Ctrl}+\mathrm{E}$
8. Which combination of key is used to switch between all running apps?
(A) $\quad$ Shift + Tab
(B) Alt + Tab
(C) $\mathrm{Ctrl}+\mathrm{Tab}$
(D) Tab

A
9. Which process determines the amount of memory present, the date/time, and which communications ports and display adapters are installed in a micro computer?
(A) Start-up utility test
(B) Power on self test
(C) Power up boot process
(D) Power on startup process
10. Which printer uses dry ink toner?
(A) Laser
(B) Drum
(C) Inkjet
(D) Dot matrix
11. What are the functions of MODEM?
(i) Analog Signal to Digital Signal
(ii) Digital Signal to Analog Signal
(iii) Analog Signal to Analog Signal
(iv) Digital Signal to Digital Signal
(A) Both (i) and (ii)
(B) (i) only
(C) (iii) only
(D) Both (iv) and (iii)
12. Basic working principle of Fiber Optics :
(A) Reflection
(B) Total internal reflection
(C) Refraction
(D) Resistance
13. What is the explanation of SNMP?
(A) Simplex Network Management Protocol
(B) Simple Network Management Protocol
(C) Simple Network Messaging Protocol
(D) Simple Network Mailing Protocol
14. Choose the true statement/statements about IPv6 :
(i) IPv6 address have a size of 128 bits
(ii) Helps in routing the data packets
(iii) Helps in Unicasting
(iv) Helps to convert analog to digital
(A) (i) and (iv) only
(B) (ii) and (iii) only
(C) (i), (ii) and (iii) only
(D) All of the above
15. Maximum number of devices connected to Bluetooth :
(A) 8
(B) 4
(C) 2
(D) 3
16. Number of pins in RJ45 :
(A) 6
(B) 3
(C) 8
(D) 1
17. The first network to implement the TCP/IP :
(A) Arpanet
(B) Ethernet
(C) Wi-fi
(D) Infrared
18. Network device to translate one protocol into the other protocol is :
(A) Gateway
(B) Modem
(C) Switch
(D) Repeater
19. Harmful software which can have unauthorized access to systems or cause damage?
(A) Phishing
(B) Snooping
(C) Denial of Service
(D) Malware
20. POP stands for :
(A) Post Open Protocol
(B) Post Office Program
(C) Post Organized Protocol
(D) Post Office Protocol
21. Which of the following is the correct format to add multiline comment in python?
(A) "comment"
(B) ""comment'""
(C) "‘""comment"""
(D) \#comment\#
22. Which is the exponent operator in python?
(A) *
(B) **
(C) $\wedge$
(D) $\%$
23. Which of the following is a python tuple?
(A) $\}$
(B) $\{10,11,12\}$
(C) $[10,11,12]$
(D) $(10,11,12)$

A
24. Which of the following statement is/are correct?
(i) a, b, c = "apple", "berry", "grapes"
(ii) $\mathrm{a}=\mathrm{b}=\mathrm{c}=$ "apple"
(iii) $\mathrm{a}=$ "apple"
(iv) $\mathrm{a}=\mathrm{b}=\mathrm{c}=$ 'apple'
(A) Only (i) and (ii)
(B) Only (ii) and (iii)
(C) (i), (ii), (iii) and (iv)
(D) Only (i)
25. What is the output of following code snippet?

Print ((eval(" 'py’ * 5"))
(A) py py py py py
(B) py 5
(C) $5 p y$
(D) $\mathrm{py*} 5$
26. containing three elements.
(A) Partition
(B) Rpartition
(C) Lpartition
(D) Split
27. Which of the following is a user defined data type in python?
(A) List
(B) Tuples
(C) Dictionary
(D) Class
28. Which of the following is used to create an empty set in python?
(A) $\operatorname{set}()$
(B) $\operatorname{set}\}$
(C) $\operatorname{set}[]$
(D) ()
29. What will be the output of following python code?
$\mathrm{a}=2$
b $=5$
print ( $\mathrm{a}, \mathrm{b}$ )
$\mathrm{a}, \mathrm{b}=\mathrm{b}, \mathrm{a}$
print (a, b)
(A) 2552
(B) 2525
(C) 5252
(D) 5225
30. What do we use to define a block of code in python?
(A) Key
(B) Brackets
(C) Block
(D) Indentation
31. DCL stands for:
(A) Data Consistency Language
(B) Data Configuration Language
(C) Data Control Language
(D) Database Control Language
32. In relational model tables are also known as :
(A) Tuples
(B) Relations
(C) Schema
(D) Structures
33. property of transaction ensures that multiple transactions can occur independently without interference.
(A) Consistency
(B) Isolation
(C) Durability
(D) Atomicity
34. Which of the following statement is/are correct about keys in MySql?
(i) A foreign key is a field (or collection of fields) in one table that refers to the primary key in another table
(ii) There will be more than one primary key in one table.
(iii) A table can have multiple foreign keys
(iv) A table can have multiple candidate keys, but can only have one primary key.
(A) (i) and (ii)
(B) Only (i), (iii) and (iv)
(C) Only (i) and (iv)
(D) All of above (i), (ii), (iii) and (iv)
35. Which is the correct syntax to create a stored procedure?
(A) CREATE PROCEDURE procedure_name AS
sql_statement
GO;
(B) CREATE STOREDPROCEDURE procedure_name

AS
sql_statement
GO;
(C) CREATE PROCEDURE procedure_name

AS
sql_statement
START;
(D) CREATE PROCEDURE procedure_name
sql_statement
GO;
36. A $\qquad$ is basically a program which gets automatically executed in response to some events such as modification in the database.
(A) Cursor
(B) Method
(C) Trigger
(D) Action
37. A table that displays data redundancies yields anomalies.
(A) Insertion
(B) Deletion
(C) Update
(D) All of the above
38. Which of the following statements creates a new table 'skilledworker' that has the same schema as 'worker'?
(A) create table skilledworker;
(B) Create table skilledworker like worker;
(C) Create Table skilledworker as worker;
(D) Create table like skilledworker;
39. Which is right statement to insert multiple records?
(A) INSERT INTO TABLENAME VALUES ('col1'; 'col2'), ('col1', 'col2'),...
(B) INSERT INTO TABLENAME VALUES ('col1', ‘col2'), VALUES ('col1', ‘col2'),...
(C) INSERT INTO VALUES OF TABLENAME ('col1', 'col2'), ('col1', 'col2'),...
(D) INSERT INTO TABLENAME VALUES ('col1', ‘col2'), TABLENAME VALUES ('col1', 'col2'),...
40. Which join is to be used between two tables A and B when the resultant table needs rows from A and B that matches the condition and rows from A that does not match the condition?
(A) Inner Join
(B) Cross Join
(C) Outer Join
(D) None of the above
41. Which interface is used to declare core methods in java?
(A) Comparator
(B) Event listener
(C) Set
(D) Collection
42. What is the output of following code?

Class main $\{$
Public static void main(String[ ] args)\{
boolean flag;
System.out.println(flag);

```
    }
```

\}
(A) True
(B) False
(C) It will display an error message
(D) 1
43. What will be the output of following code?

Class Main \{
public static void main(String[] args) \{
System.out.println(9.0/2);
System.out.println(9/2);
System.out.println(9.0/2.0);
System.out.println(9/2.0);
\}
\}
(A) 4.5
(B) 4
4
5
4.5
4.5
4.5
4.5
(C) 4.5
(D) 4
4.5
4
4.5
4.5
4.5
4
44. A thread is said to $\qquad$ when it is prevented from entering into the runnable state and subsequently the running state.
(A) Dead
(B) Blocked
(C) Runnable
(D) Stopped
45. Which exception is thrown when Java is out of memory?
(A) Memory Error
(B) Out Of Memory Error
(C) Memory out Of Bounds Exception
(D) Memory Full Exception
46. What will be the output of following code?

Public Class Solution
\{
Public static void main(String[ ] args)\{
Short x = 10;
$\mathrm{x}=\mathrm{x}$ * 10 ;
System.out.print(x);
\}
\}
(A) 50
(B) Compile error
(C) Exception
(D) 10
47. Automatic type conversion is possible in which of the possible cases?
(A) Int to long
(B) Long to int
(C) Byte to int
(D) Short to int
48. Which of the following is true about the keyword super?
(i) Super may only be used within a subclass constructor method.
(ii) The call to superclass constructor must appear as the first statement within the subclass constructor
(iii) The parameters in the super call must match the order and type of the instance variable declared in the superclass.
(iv) The keyword sup can be used instead of the keyword super.
(A) Only (i), (ii) and (iv)
(B) Only (i) and (ii)
(C) Only (i), (ii) and (iii)
(D) All of above
49. What will be the output of following code in case of $x=20, x=40, x=70$ ?

```
Class main {
            Public static void main(string[ ] args) {
            double salary;
            int x;
salary = (x ! = 40)?((x<40)?(4*x + 100) : (4.5 *x +100)) : 300;
            System.out.println (salary);
            }
}
```

(A) 180.0, 300.0, 415.0
(B) $300.0,415.0,180.0$
(C) $300.0,180.0,415.0$
(D) 180, 300, 415
50. Which of the following statements is/are true about method overriding?
(i) Implements "run time polymorphism".
(ii) Implements "compile time polymorphism".
(iii) Occurs between superclass and subclass.
(iv) On error it can be caught at compile time.
(A) Only (i) and (iii)
(B) Only (ii) and (iii)
(C) Only (i), (iii) and (iv)
(D) None of above
51. Which among the following are valid operators in JavaScript?
(i) $\&=$
(ii) ! = =
(iii) $===$
(iv) ??=
(A) (i) only
(B) (i) and (iii) only
(C)
(i), (ii) and (iii) only
(D) All of the above
52. Which among the following are valid popup boxes in JavaScript?
(i) alert ()
(ii) prompt ()
(iii) msgbox ()
(iv) confirm ()
(A) (i) and (ii) only
(B) (i) and (iii) only
(C)
(i), (ii) and (iv) only
(D) All of the above

A
53. With the document object model, JavaScript can
(i) Remove existing HTML
(ii) Add new HTML elements and attributes
(iii) React to all existing HTML events in the page
(iv) Change all CSS styles in the page
(A) (ii) and (iv) only
(B) (i) and (iv) only
(C) (ii), (iii) and (iv) only
(D) All of the above
54. Which among the following is not a JavaScript keyword?
(A) this
(B) buffer
(C) enum
(D) export
55. Which of the following are valid array methods in JavaScript?
(i) join()
(ii) push()
(iii) $\operatorname{pop}()$
(iv) $\operatorname{shift}()$
(A) (ii) and (iii) only
(B) (i) and (iv) only
(C) All of the above
(D) None of the above
56. Which error indicates that the value is outside the range of expected type?
(A) Type Error
(B) Range Error
(C) Syntax Error
(D) Eval Error
57. Which is the correct syntax for referring to an external script called "abc.js"?
(A) <script href = "abc.js"
(B) <script src = "abc.js"
(C) <script name = "abc.js"
(D) <script type = "abc.js"
58. When we execute the following JavaScript code segment, what will be the output?
var sname;
alert(sname)
(A) NaN
(B) sname
(C) undefined
(D) error
59. Which of the following methods can be used to display data in some form using JavaScript?
(A) document.write()
(B) console. $\log ($ )
(C) window.alert()
(D) all of the above
60. In JavaScript, which method removes the last element from an array?
(A) remove()
(B) push()
(C) $\operatorname{pop}()$
(D) delete()
61. In MS word, which technique is used to select the whole paragraph :
(A) $\mathrm{Ctrl}+\mathrm{A}$
(B) Single click within the paragraph
(C) Double click within the paragraph
(D) Triple click within the paragraph
62. Which is the shortcut key to insert a hyperlink in MS Word?
(A) $\quad \mathrm{Ctrl}+\mathrm{K}$
(B) $\mathrm{Ctrl}+\mathrm{L}$
(C) $\mathrm{Ctrl}+\mathrm{H}$
(D) $\mathrm{Ctrl}+\mathrm{S}$
63. Which of the following are valid minimum and maximum zoom sizes in MS Word?
(A) 10,100
(B) 10,500
(C) 20, 200
(D) 20,500
64. Which of the following is not true regarding conditional formatting?
(A) You can add more than one condition to check
(B) You can set condition to look for Bold and apply Italics on them
(C) You can apply Font, Border and pattern formats that meets the specified conditions
(D) You can delete any condition from Conditional Formatting Dialog Box if it is not required
65. Which dialog box allows you to change a field name in a PivotTable?
(A) Field Options
(B) Field Pane
(C) Field Settings
(D) Field Structure

A
66. Which of the following is invalid regarding the protection in Excel?
(A) Protect Worksheet
(B) Protect Workbook
(C) Protect Workspace
(D) All of the above are valid
67. In which ribbon/tab does the macro group appear?
(A) Data
(B) View
(C) Review
(D) Formulas
68. The default view of an Excel Worksheet is :
(A) Normal View
(B) Page Layout View
(C) Page Break View
(D) Print Layout View
69. Which button is used to add instant animation to the presentation and helps interactive presentation?
(A) Add Button
(B) Start Button
(C) Insert Button
(D) Action Button
70. Which among the following is not an Entrance Animation effect?
(A) Flash Once
(B) Spinner
(C) Dissolve Out
(D) Bounce
71. A CSS property that specifies an element's transparency is:
(A) Hover
(B) Opacity
(C) Clearfix
(D) Overlay
72. Which of these browsers supports server - side events?
(A) Mozilla Firefox
(B) Google Chrome
(C) Opera
(D) All of these
73. Which attribute specifies that the audio file will start over again, every time when it is completed?
(A) src
(B) loop
(C) preload
(D) autoplay
74. Which log file does Apache HTTP server maintain?
(A) Apache/logs/access.log
(B) Apache/access/file.log
(C) Apache/logs/error.log
(D) Both (A) and (C)
75. Which HTML element is used to define a multi-line input field?
(A) <text>
(B) <blocktext>
(C) <textfield>
(D) <textarea>
76. Link URL in HTML is specified using - attribute.
(A) url
(B) link
(C) href
(D) rel
77. Which of the following are automatically loaded and operates as a part of browser?
(A) Plug-ins
(B) Utilities
(C) Add-ons
(D) Widgets
78. The attribute which is used to set the white space between the cell edge and the cell content is:
(A) Cellspacing
(B) Colspan
(C) Rowspan
(D) Cellpadding
79. What is the use of iframe in HTML?
(A) To display a webpage in a new tab
(B) To display a webpage within a webpage
(C) To display a webpage without browser
(D) To display a webpage with animation effect
80. If the background image of a web page is smaller than the screen what will happen?
(A) It will be stretched
(B) It will leave a blank space at the bottom of the page
(C) It will leave a blank space at the Top of the page
(D) It will be repeated
81. Which of these is not included as a type of cloud computing?
(A) Public Cloud
(B) Private Cloud
(C) Hybrid Cloud
(D) Digital Cloud

A
82. When two persons claim for the same domain name, it is known as?
(A) Cyber Trafficking
(B) Cyber Warfare
(C) Cyber Squatting
(D) Cyber Terrorism
83. Example for IaaS provider :
(A) Salesforce.com
(B) Digital Ocean
(C) Microsoft Azure
(D) Dropbox
84. Pillars of Information Assurance are :
(i) Integrity
(ii) Confidentiality
(iii) Authentication
(iv) Availability
(A) (i),(ii) and (iv)
(B) (i) and (ii)
(C) (i), (ii), (iii) and (iv)
(D) (iii) only
85. What are the advantages of cloud computing?
(i) Cost saving
(ii) Scalability
(iii) Mobility
(iv) Downtime
(A) (i), (ii), (iii) and (iv)
(B) (i), (ii) and (iii)
(C) (i) and (ii)
(D) (i) only
86. Which is a method of defeating a cryptographic scheme by trying a large number of possibilities?
(A) Brute Force Attack
(B) Smurf Attack
(C) DoS Attack
(D) Teardrop Attack
87. Secret recipients' address given in :
(A) To field
(B) CC field
(C) BCC field
(D) From field
88. If a person booked a railway ticket through IRCTC, but he couldn't get the reservation in the time of chart preparation of the concerned train. Then IRCTC refund the amount to his bank account and it is known as :
(A) COD
(B) Charge back
(C) Payment
(D) Service Denial Charge
89. Which provide the IP address corresponding to the URL?
(A) Web server
(B) Database server
(C) Domain Name Server
(D) Web Browser
90. Categories of E-Commerce :
(i) Business to Business
(ii) Government to Business
(iii) Business to Customer
(iv) Government to Citizen
(A) (i), (ii) and (iii)
(B) (ii) and (iv)
(C) (i) only
(D) (i), (ii) (iii) and (iv)
91. Which helps to define common syntax in semantic web?
(A) RDF
(B) RDFS
(C) URI
(D) XML
92. Cyber crimes against government includes :
(i) Cyber Vandalism
(ii) Cyber Warfare
(iii) Cyber Terrorism
(iv) Cyber Trafficking
(A) (i), (ii), (iii) and (iv)
(B) (i) only
(C) (i) and (ii)
(D) (ii) and (iii)
93. Which one is the intermediary responsible for processing the transfer of fund from payee to recipient in an E-commerce transaction?
(A) Credit card
(B) Debit Card
(C) Payment Gateway
(D) Wallet
94. Who is the father of cloud computing?
(A) Charles Bachman
(B) Edgar Frank Codd
(C) J.C.R. Licklider
(D) Sharon B. Codd
95. Unsolicited email sent in bulk is :
(A) Threat
(B) Virus
(C) Spam
(D) Phishing
96. Which of the following is not a type of cloud server?
(A) Public Cloud Servers
(B) Private Cloud Server
(C) Dedicated Cloud Servers
(D) Merged Cloud Servers
97. Attacking the victims through fake URL resembling that of a valid financial institution is called as :
(A) Worms
(B) Phishing
(C) Trojans
(D) Computer virus
98. In credit/ Debit cards, CVV stands for :
(A) Card Verification Value
(B) Credit Verification Value
(C) Card Validity Value
(D) Credit Verification Visual
99. How many types of preventive controls?
(A) 2
(B) 3
(C) 4
(D) 5
100. The following are different types of cloud computing services except :
(A) Infrastructure as a Service
(B) Hardware as a Service
(C) Platform as a Service
(D) Software as a Service

SPACE FOR ROUGH WORK

SPACE FOR ROUGH WORK

