



Non-Teaching Recruitment

Question Paper

Name of the Candidate	:	
Application No.	:	
Name of the Post	:	Junior Technical Superintendent (CSE)
Exam Level	:	Screening Test (Level-1)
Date of Exam:	:	17.11.2023
Duration	:	120 Minutes
Total Marks	:	100

Instructions to the Candidates:

1. This Question paper contains printed pages with **100** questions.
2. All questions are multiple choice type questions (MCQs) with four choices (A), (B), (C), (D).
3. Candidates are not allowed to carry any paper, notes, books, gadgets etc. to the examination hall. Any candidate found using or in possession of such unauthorized materials or involved in copying or impersonation or adopting unfair means or behaviors will be disqualified and may be subjected to penal action.
4. There is only one correct answer. Choose the answer from among the four options given and mark the answer by darkening the appropriate bubble marked A, B, C, or D in the attached OMR.
5. Each question carries **ONE (1)** mark only. **1 mark** will be awarded for each correct answer; **0.25** mark will be deducted for each wrong answers. (Please refer instructions given at the back side of OMR Sheet)

1.	Which of the following operating systems does not support more than one program at a time? A. Linux B. Windows C. MAC D. DOS
2.	In computer terminology, which of the following describe device drivers? A. Hardware that allows interaction between the peripheral device and the operating system. B. Software that allows the user to control the operating system. C. Software that allows interaction between the peripheral device and the operating system. D. Software that allows the user to control the operating system.
3.	A new laptop has been produced that weighs less, is smaller and uses less power than previous laptop models. Which of the following technologies has been used to accomplish this? A. Universal serial bus mouse B. Faster random-access memory C. Blu ray drive D. Solid-state hard drive
4.	Which of the following is the correct order of the four major functions of a computer? A. Process, output, input, storage C. Input, output, process, storage B. Process, storage, input, output D. Input, process, output, storage
5.	Which of the following is an example of an input device? A. Scanner B. Speaker C. CD drive D. Printer
6.	Given the following email fields, which of the email addresses will "sachin" be able to see when he receives the message? To ram@test.com Cc laxman@test.com; sita@test.com Bcc sachin@test.com; rama@test.com A. ram@test.com B. ram@test.com; laxman@test.com; sita@test.com C. ram@test.com; rama@test.com D. ram@test.com; rama@test.com; laxman@test.com; sita@test.com
7.	Which of the following domains is used for profit businesses? A. .com B. .edu C. .org D. .net
8.	Operating system is a general kind of — software. A. Communication B. Application C. System D. Word processing software
9.	The minimum number of bits required to store any three-digit decimal number is equal to A. 3 B. 5 C. 8 D. 10
10.	POP3 and IMAP are email accounts in which A. One automatically gets one's mail every day B. One has to be connected to the server to read or write one's mail C. One only has to be connected to the server to send and receive email D. One does not need any telephone lines

11.	BIOS of the computer is stored in — A. RAM B. Hard Disk C. ROM D. FLOPPY Drive
12.	Which password is used in the BIOS(CMOS) to prevent end uses from accessing the BIOS contents. A. Supervisor B. User C. Administrator D. Local
13.	Which utility is useful in identifying a program that is hogging the processor? A. Task Manager C. Device Manager B. System Manager D. Storage Manager
14.	Which of the following should be your first choice to remove an application that you no longer need? A. Delete the program files B. Use the uninstall program C. Use the Add or Remove Programs Applet D. Use the Registry Editor
15.	The modification of the software to match changes in the ever-changing environment falls under the ____ category of software maintenance? A. Corrective B. Adaptive C. Perfective D. Preventive
16.	What type of software testing is generally used in software maintenance? A. Regression testing B. System testing C. Integration testing D. Unit testing
17.	Which of the following is used to end the 408 process without allowing it to exit gracefully? A. kill 408 B. kill -15 408 C. kill -1 408 D. kill -9 408
18.	Which of the following is true in the context of open-source software? A. The GPL allows anybody to modify the software and release it commercially. B. The GPL allows software that is modified to be released as closed source software. C. The GPL only prohibits unmodified software from being commercially repackaged. D. The GPL ensures that all subsequent versions of software remain open source.
19.	What is the output of the following C program? #include<stdio.h> int main() { const float pi; pi = 3.14; printf("%f", pi);

	<pre>return 0; }</pre> A. Compile-time error B. 3.0 C. 3.14 D. 3
20.	What is the output of the following C program? <pre>#include<stdio.h> int main() { int x = 2, y = 0; int z = y (x != 10); printf("%d", z); return 0; }</pre> A. 0 B. 1 C. 20 D. 2
21.	The following pseudocode is an example of _____ structure. <pre>Get number Get another number If the first number is greater than the second, then Print the first number Else Print second number</pre> A. Sequence B. Decision C. Loop D. Nested
22.	To make your website mobile-friendly, you can make your website ____. A. Fast loading B. Light C. Reactive D. Responsive
23.	To change the sources for apt-get, the _____ file is edited. A. sources.list B. apt.sources C. sources.apt D. dpkg.sources
24.	What is the use of Ping command? A. To test a device on the network is reachable B. To test a hard disk fault C. To test a bug in a Application D. To test a Pinter Quality
25.	JDBC classes are defined in ____ packages. A. sql and javax.sql B. jdbc and javax.jdbc

	C. jdbc and java.jdbc.sql D. rdb and javax.rdb
26.	Which of the following method is static and synchronized in JDBC API? A. prepareCall() B. getConnection() C. executeUpdate() D. executeQuery()
27.	Which of the following is not a variable scope in PHP? A. Extern B. Local C. Global D. Static
28.	To use MySQL on your computer, you will need A. Perl, PHP or Java B. a browser C. FTP and Telnet D. some sort of client program to access the databases
29.	Which character is used in Python to make a single-line comment? A. / B. // C. ! D. #
30.	A specification of how the user moves from window to window, interacting with the application programs to perform useful work is called A. user dialogs B. navigation specifications C. interface specifications D. prototyping specifications
31.	What is the purpose of the DHCP server? A. to provide storage for email B. to translate URLs to IP addresses C. to translate IPv4 addresses to MAC addresses D. to provide an IP configuration information to hosts
32.	Which of the following command is used to check Linux version? A. kernel B. uname -a C. uname -n D. uname -s
33.	Which command do you use to create Linux file systems? A. mount B. mkfs C. fdisk D. fsck

34.	Wi-Fi stands for _____ A. Wireless Fidelity B. Wireless Functioning C. Wireless Function D. Wireless Family
35.	The number of primary partitions that exists in hard disk is _____? A. 4 B. 8 C. 16 D. 32
36.	The default shell used on Linux Operating System is _____ A. csh B. rsh C. bash D. tcsh
37.	Which key, when pressed once, is used to provide command completion at the command line? A. Tab B. Esc C. Enter D. Ctrl
38.	What should you do to keep unauthorized users from changing your home network settings? A. Change the firewall setting in your computer B. Change the default administrator password and SSID C. Change the MAC address of the router D. Change the IP address of the router
39.	What aspect of DHCP allows servers to manage multiple physical networks? A. Renewal B. Rebinding C. Scopes D. Relay agents
40.	If you want to find the number of routers between a source and destination, the utility to be used is _____ A. IP lookup B. ping C. netconfig D. Traceroute
41.	Which key, when pressed twice, is used to provide command completion at the command line? A. Tab B. Esc C. Enter D. Ctrl
42.	Which key allows you to view the last command entered? A. down arrow B. up arrow C. right arrow D. left arrow

43.	Which of the following HTTP status codes indicates a successful response to an HTTP request? A 200 OK B. 404 Not Found C. 500 Internal Server Error D. 302 Found
44.	What is the purpose of the HTML <code><canvas></code> element? A. It's used for embedding audio files in web pages. B. It allows for creating 2D and 3D graphics using JavaScript. C. It's a container for rendering scalable vector graphics (SVG). D. It's used to display tabular data in a structured format.
45.	Which of the following is NOT a valid way to include external JavaScript files in an HTML document? A) <code><script src="script.js"></script></code> B) <code><link rel="stylesheet" href="script.js"></code> C) <code><script type="text/javascript" src="script.js"></script></code> D) <code><script include="script.js"></script></code>
46.	What is the purpose of a "web server" in the context of web development? A) To design the user interface of a website B) To store and manage website content and serve it to users C) To manage the client-side scripting of a website D) To optimize a website's SEO ranking
47.	Which CSS property is used to control the order in which elements are stacked on top of each other? A) z-index B) stacking-order C) layer-order D) stack-index
48.	In web development, what is the purpose of the HTML <code><meta></code> tag? A) To create interactive forms B) To specify the character encoding of the document C) To define a section within a web page D) To include external JavaScript files
49.	What is the main purpose of the CSS property "media queries"? A) To control the media elements in a web page B) To add media files like images and videos C) To apply different styles based on the device's characteristics, such as screen size D) To control the print layout of a web page

50.	The _____ provides information about hardware installation, configuration, and hardware status A. Device manager B. Control panel C. Storage Manger D. Program manager
51.	A bar that inform you the available options in your computer, opened applications, background running applications and can be used to switch between applications quickly is A. Menu bar B. Tool bar C. Status bar D. Task bar
52.	To delete a file without allowing it to store in recycle bin A. Press Delete key B. Press Shift + Delete key C. Press Ctrl + Delete key D. Press Alt + Delete key
53.	You should choose this mode if you don't know how long you won't use your computer but want to have the same desktop state when you resume A. Shut Down B. Restart C. Sleep D. Hibernate
54.	If you hard disk is partitioned into 3 drives, the number of recycle bin for that hard disk is A. 1 B. 2 C. 3 D. 4
55.	Which of the following is not a part of the control panel? A. Date and time B. My documents C. Add or remove program D. Display
56.	If the displayed system time and date is wrong, you can reset it using A. Write B. Calendar C. Write file D. Control panel
57.	Given below are two statements. Statement I: The use of ICT in organizing teaching-learning programmes in Universities has the potential to optimize the learning outcomes. Statement II: Formative assessment provides support to enhance the quality of teaching-learning sessions. A. Both Statement I and Statement II are correct. B. Both Statement I and Statement II are incorrect. C. Statement I is correct, but Statement II is incorrect. D. Statement I is incorrect, but Statement II is correct.
58.	Given below are two statements. Statement I: Cache memory is faster than random access memory. Statement II: Random access memory is closer to the processor than cache memory. A. Both Statement I and Statement II are correct. B. Both Statement I and Statement II are incorrect. C. Statement I is correct, but Statement II is incorrect. D. Statement I is incorrect, but Statement II is correct.
59.	Which statement(s) is/are false? Statement I: High availability has an adverse effect on energy efficiency. Statement II: A datacenter stores and shares applications and data. A. Statement I B. Statement II C. Both Statement I and Statement II D. Neither Statement I and Statement II

60.	Your router has the following IP address on Ethernet0: 172.16.2.1/23. Which of the following can be valid host IDs on the LAN interface attached to the router? I. 172.16.1.100 II. 172.16.1.198 III. 172.16.2.255 IV. 172.16.3.0 A. 2 and 3 only B. 3 and 4 only C. 1, 2 and 3 only D. 1, 3 and 4 only
61.	Which of the following statement(s) is/are true in respect of wireless technology? Statement I: Bluetooth is a wireless technology that can be used to connect a headset to a mobile phone. Statement II: Bluetooth is a long-range wireless technology and is a low-cost means of data transfer. A. Statement I is only correct. B. Statement II is only correct. C. Both Statement I and Statement II are correct. D. Neither Statement I nor Statement II is correct.
62.	What will be the output of the following C code? <pre>#include<stdio.h> int main() { int i = 0; switch(i) { case '0': printf("India"); break; case '1': printf("INDIA"); break; default: printf("India INDIA"); } return 0; }</pre> A. India B. INDIA C. India INDIA D. Error
63.	What will be the output of the following C code? <pre>#include<stdio.h> int main()</pre>

	<pre>{ printf("%c","IndiaINDIA"[4]); return 0; }</pre> A. a B. aINDIA C. I D. Error
64.	In a class, Ram has secured the highest mark among all the students. While a conversation with Ram, he said that I do the right thing at the right time, which leads to success. If we consider Ram as an agent, then he should be a _____ type of agent. A. Rational B. Omniscient C. Irrational D. Consistent
65.	Consider the JavaScript code. <pre>var y = "12"; function f () { var y = "6"; alert (this.y); function g () {alert (y);} g (); } f ();</pre> If M is the number of alert dialog boxes generated by this JavaScript code and D1, D2,..., DM represents the content displayed in each of the M dialog boxes, then A. M = 3; D1 displays "12"; D2 displays "6"; D3 displays "12". B. M = 3; D1 displays "6"; D2 displays "12"; D3 displays "6". C. M = 2; D1 displays "6"; D2 displays "12". D. M = 2; D1 displays "12"; D2 displays "6".
66.	How can you start a transaction in the database? A. By asking a transaction object to your connection and calling the method begin() on it B. By asking a transaction object to your connection and setting the autoCommit property of the transaction to false C. By calling the method beginTransaction() on the connection object D. By setting the autoCommit property of the connection to false and executing a statement in the database
67.	What is the correct sequence to create a database connection? I. Import JDBC packages II. Open a connection to the database III. Load and register the JDBC driver IV. Execute the statement object and return a query result set V. Create a statement object to perform a query VI. Close the result set and statement objects VII. Process the result set VIII. Close the connection A. I, III, II, V, IV, VII, VI, VIII

	B. I, II, III, V, IV, VII, VIII, VI C. II, I, III, IV, VIII, VII, V, VI D. I, III, II, IV, V, VI, VII, VIII
68.	Which two statements describe the IP address 10.16.3.65/23? 1. The subnet address is 10.16.3.0 2. The lowest host address in the subnet is 10.16.2.1 3. The last valid host address in the subnet is 10.16.2.254 4. The broadcast address of the subnet is 10.16.3.255 A. 1 and 3 B. 2 and 4 C. 1, 2 and 4 D. 2, 3 and 4
69.	Consider the following statements about Network operating system? i. This type of system is very expensive to set up and maintain. ii. Trained network administrators are required for network administration. iii. Failure of any node in a system affects the whole system. Which of the above statements are True? A. i and ii B. ii and iii C. i and iii D. i, ii, and iii
70.	What is the subnetwork address for a host with the IP address 200.10.5.68/28? A. 200.10.5.56 B. 200.10.5.32 C. 200.10.5.64 D. 200.10.5.0
71.	To test the IP stack on your local host, which IP address would you ping? A. 127.0.0.0 B. 1.0.0.127 C. 127.0.0.1 D. 127.0.0.255
72.	The network address of 172.16.0.0/19 provides how many subnets and hosts? A. 7 subnets, 30 hosts each B. 8 subnets, 8,190 hosts each C. 8 subnets, 2,046 hosts each D. 7 subnets, 2,046 hosts each
73.	You need to subnet a network that has 5 subnets, each with at least 16 hosts. Which classful subnet mask would you use? A. 255.255.255.192 B. 255.255.255.224

	C. 255.255.255.240 D. 255.255.255.248
74.	Identify false statement. A. You can find deleted files in recycle bin B. You can restore any files in recycle bin if you ever need C. You can increase free space of disk by sending files in recycle bin D. You can right click and choose Empty Recycle Bin to clean it at once
75.	You suspect your system is failing to boot because of a corrupt master boot record. Which utility is the best to fix this? A. Automated System Restore C Device Manager B. C. System Restore D. Recovery Console
76.	Ram complains that his system seems sluggish and he keeps running out of disk space. What tool can you use to get rid of unnecessary files and compress older files? Select the best answer. A. Disk Cleaner B. Disk Doctor C. File Manager D. Registry Cleaner
77.	Identify the output of the following code snippet <pre>#include<stdio.h> #include<stdlib.h> void fun(int *p){ p = (int*) malloc(sizeof(int)); *p = 10; return; } void main(){ int a = 20, * p; p = &a; fun(a); printf("%d",*p); }</pre> A. 20 B. 10 C. Buffer Overflow Error D. Compile-Time Error
78.	What is the amount of swap space to be allocated on a machine having 1 TB diskspace 16 GB RAM 256 GB SSD for installing ubuntu A. 500 GB B. 16 GB C. 32 GB D. 8 GB
79.	Which of the following statements is true about boot loaders (i) UEFI allows GUI based interaction (ii) UEFI does not support MBR (iii) Secure Booting is a feature of Legacy BIOS

	(iv) UEFI can run in 64 bit mode A. (i) and (ii) B. (i) and (iii) C. (i) and (iv) D. (iii) and (iv)
80.	Which CSS property is used to create a 3D effect, making text or elements appear to pop out of the page? A. transform B. perspective C. depth-effect D. illusion
81.	In web development, what does AJAX stand for? A) Asynchronous JSON and XML B) Advanced JavaScript and XML C) Asynchronous JavaScript and XML D) All JavaScript and XML
82.	Which of the following is not relational DBMS Software? A. Oracle B. IBM DB2 C. Sybase D. MongoDB
83.	Which of the following is false? A. Every binary relation is in BCNF B. Every binary relation is in 3NF C. Every binary relation is in 2NF D. Every binary relation is not in BCNF
84.	Group by clause in SQL is used for _____ A. To filter rows based on the condition. B. To filter groups based on the condition. C. To delete relation table D. To display the original data
85.	Which of the following is not basic relational operator? A. Cross product B. Union C. Natural join D. Minus
86.	Which HTML5 element is used to draw graphics on a web page using JavaScript? A. <canvas> B. <drawing> C. <graphic> D. <painting>
87.	. What does the term "responsive web design" refer to? A. Designing websites that respond to voice commands B. Designing websites that adapt to different screen sizes and devices C. Designing websites that respond to user emotions D. Designing websites with a responsive customer service chatbot

88.	Which programming language is most commonly used for server-side web development? A. HTML B. CSS C. JavaScript D. PHP
89.	Which file format is commonly used for storing images with transparency on the web? A. JPEG B. GIF C. PNG D. D) SVG
90.	What does SEO stand for in the context of web development? A. Search Engine Optimization B. Social Engagement Online C. Site Enhancement Options D. Script Execution Order
91.	Which CSS property is used to add shadows to text or elements? A. box-shadow B. text-shadow C. shadow-effect D. D) element-shadow
92.	What is the purpose of the HTML <form> element? A. To define a navigation menu for a website B. To create a contact form for users to submit information C. To display a video on a web page D. D) To define a section of the page
93.	Which HTML tag is used to embed a video in a web page? A. <video> B. C. <embed> D. <media>
94.	What is the purpose of the CSS property "float"? A. To make elements disappear from the page B. To make elements take up the full width of the page C. To align elements to the left or right, allowing text to wrap around them D. To add animation effects to elements

95.	Which HTML tag is used to define the structure of a web page, including headings, paragraphs, and lists? A. <body> B. <div> C. <section> D. D) <article>
96.	What is the purpose of the HTML <form> element? A. To define a navigation menu for a website B. To create a contact form for users to submit information C. To display a video on a web page D. D) To define a section of the page
97.	What is a "favicon" in the context of web design? A. A security feature that protects websites from cyberattacks B. A small icon that appears in the browser's address bar or tab for a website C. A JavaScript library for creating interactive forms D. D) A technique for optimizing images for faster loading
98.	. Which JavaScript framework is known for building single-page applications and is often used for creating dynamic web interfaces? A. Angular B. jQuery C. React D. D) Vue.js
99.	In the context of web security, what does "XSS" stand for? A. Extra Secure Servers B. Cross-Site Scripting C. Extensible Style Sheets D. D) Xtra Safe Sites
100.	Which of the following is a version control system commonly used by web developers to track changes in their codebase? A. GIT B. HTML C. HTTPS D. SQL