



Non-Teaching Recruitment

Question Paper

Name of the Candidate	:	
Application No.	:	
Name of the Post	:	Junior Technician (CSE)
Exam Level	:	Screening Test (Level-1)
Date of Exam:	:	20.11.2023
Duration	:	120 Minutes
Total Marks	:	100

Instructions to the Candidates:

1. This Question paper contains **16** 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. Identify the latest WiFi version.
 - a. WiFi 4
 - b. WiFi 5
 - c. WiFi 6
 - d. WiFi 7

2. You are not able to access the Internet using your laptop. Your laptop has the following configuration. Why can't you access the Internet?
*Connection-specific DNS Suffix . :
Description : Dell Wireless WLAN Mini-PCI Card
Physical Address. : 00-0B-7D-11-54-3C
Dhcp Enabled. : Yes
Autoconfiguration Enabled : Yes
IP Address. : 10.0.0.255
Subnet Mask : 255.255.255.255
Default Gateway : 10.0.0.100
DHCP Server : 10.0.0.225
DNS Servers : 10.0.0.100, 10.0.0.101
Lease Obtained. : Thursday, October 26, 2023 11:47:10 AM
Lease Expires : Friday, October 27, 2023 11:47:10 AM*
 - a. IP address is misconfigured
 - b. Incorrect subnet mask
 - c. Incorrect default gateway
 - d. Incorrect IP address and subnet mask

3. Swap space is created in
 - a. Cache memory
 - b. Main Memory
 - c. Secondary storage
 - d. CPU registers

4. Monitors, speakers, printers are called as
 - a. Input Devices
 - b. Output devices
 - c. Storage devices
 - d. All of the above

5. A pen drive uses the following memory
 - a. Flash
 - b. Cache
 - c. RAM
 - d. ROM

6. Nibble is a unit of digital information that consists of ____
- a. 2 bits
 - b. 4 bits
 - c. 8 bits
 - d. 16 bits
7. The following is not a typical sign of antivirus activity on a system
- a. Slow performance
 - b. Unusual error messages
 - c. Unexpected network traffic
 - d. Unexpected power failures
8. Your system was infected by malicious code after you downloaded a solitaire game from the internet. What type of malware did you likely encounter?
- a. Worm
 - b. Virus
 - c. Trojan Horse
 - d. Logic Bomb
9. The following in the MS Power Point refer to visual movements to the slides as you move from one slide to the next
- a. Custom animation
 - b. Slide layouts
 - c. Slide transitions
 - d. Rehearsed times
10. In Excel, which cell is directly to the right of cell F8?
- a. E8
 - b. E9
 - c. F9
 - d. G8
11. If a cell in spreadsheet shows #####, it means that
- a. The formula has a syntax error
 - b. The column is too narrow to show all the digits of a number
 - c. The function has the wrong sign
 - d. Both a and c
12. In Windows OS, where do you go to kill a not responding program?
- a. System Properties Dialog box
 - b. Control Panel
 - c. Task Manager
 - d. Power on System Test

13. In Powerpoint, the following turns multiple objects into a single object
- Combine
 - Group
 - Join
 - Create
14. The following command in linux is used to remove files
- delete
 - remove
 - del
 - rm
15. The service that translates domain names to IP addresses
- NIS
 - ARP
 - DNS
 - DIS
16. How many primary partitions can exist on one drive
- Two
 - Three
 - Four
 - No limit
17. What is the core of the Linux operating system
- Terminal
 - Shell
 - Kernel
 - Commands
18. The following command displays hidden files
- ls -a
 - ls -l
 - ls -h
 - ls -k
19. The following sign represents home directory
- #
 - ~
 - \$
 - ..
20. What should be the minimum length of a secure password?
- 8
 - 10

- c. 12
 - d. No minimum limit
21. How would you switch to virtual terminal 1 on linux OS to run commands without interfering with GUI:
- a. Ctrl+Shift+F1
 - b. Ctrl+Alt+F1
 - c. Alt+F1
 - d. Shift+F1
22. MS Word is an example of
- a. System Software
 - b. Application Software
 - c. Operating Software
 - d. Accounting Software
23. In MS Office, _____ contains buttons and menus that provide quick access to commonly used commands
- a. Menu bar
 - b. Title bar
 - c. Toolbar
 - d. Find
24. Which mode loads the minimal set of drivers when starting windows?
- a. Safe Mode
 - b. Normal Mode
 - c. VGA Mode
 - d. Network Mode
25. Which of the following is not a system tool?
- a. Disk Defragmenter
 - b. Backup
 - c. Virus Scanner
 - d. All of the above
26. The essential difference between an operating system like Linux and one like Windows is that
- a. Windows can run with an Intel processor, whereas Linux cannot
 - b. Linux is a proprietary whereas Windows is not
 - c. There are multiple versions of Linux, but only one version of Windows
 - d. Any programmer can modify Linux code which is not permitted with Windows
27. When you cut or copy the text or picture, it stores temporarily in the
- a. File
 - b. Clipboard
 - c. Icon
 - d. All of the above

28. Ctrl+B in MS Word is used for
- Converting selected text to next larger size
 - Converting selected text to bold
 - Inserting a line-break
 - Backspace
29. In MS Excel, Which key combination is used to enter multiple lines in a single cell?
- Ctrl + Enter
 - Shift + Enter
 - Alt + Enter
 - Tab + Enter
30. To keep track of different editions of a document, which feature we will use
- Editions
 - Versions
 - Tracks
 - Traces
31. In a spreadsheet, to autofit the width of the column
- Double click the left border of the column
 - Double click the right border of the column
 - Double click the Title of the column
 - All of the above
32. Which of the following devices provides surge protection and battery backup power during a power outage?
- Battery strip
 - Surge strip
 - UPS
 - USB
33. The speed of a printer is measured in
- CPS (Character per second)
 - LPM (Lines Per Minute)
 - PPM (Pages Per Minute)
 - All of the above
34. The data transfer from the central processing unit to peripheral devices of computer is achieved through
- Interfaces
 - buffer memory
 - Modems
 - I/O ports

35. A technician receives an invalid certificate error when visiting a website with port 443 enabled. Other computers on the same LAN do not exhibit this symptom. Which of the following needs to be adjusted on the workstation to fix the issue?
- Date and Time
 - UEFI Boot mode
 - User access control
 - Firewall
36. A company has hired a new IT firm to manage its servers, switches and routers. The firm is geographically separated from the company and will need to be able to securely access the devices. Which of the following will provide the ability to access these devices?
- Telnet
 - SSH
 - RDP
 - VNC
37. A technician has just finished installing a secondary OS on a workstation. After rebooting the computer, the technician receives the following error: No OS found. The technician confirms the boot.ini file is correct. Which of the following is MOST likely causing this error?
- The computer has GRUB Legacy installed
 - Windows Startup services are not running
 - An incompatible partition is marked as active
 - An unsupported version of Windows is installed
38. A technician is running updates on a Windows PC. Some of the updates install properly, while others appear as failed. While troubleshooting, the technician restarts the PC and attempts to install the failed updates again. The updates continue to fail. Which of the following is the FIRST option to check?
- Visit the Microsoft Update website to see if there is an issue with a specific update
 - Look up the error number associated with the failed update
 - Look at the system Event Viewer to find more information on the failure
 - Download the failed update to install manually
39. A user's Windows laptop has become consistently slower over time. The technician checks the CPU utilization and sees that it varies between 95% and 100%. Which of the following is a tool the technician can use to resolve the issue?
- MSTSC
 - Task Manager
 - MSConfig
 - PerfMon

40. A user calls a technician and reports that her PC will not boot. The technician confirms the memory, power supply, and monitor are all working. The technician runs internal diagnostics on the PC, but the hard drive is not recognized. Which of the following messages will be displayed?
- a. Operating System Not Found
 - b. Boot Device Not Found
 - c. Hard Disk is Not Found
 - d. BIOS ROM Checksum Error
41. In Linux, which of the following directory contains configuration files
- a. /bin
 - b. /config
 - c. /etc
 - d. /lib
42. A network administrator has given a technician documentation detailing the switch ports the technician will need to patch in for a network upgrade. Which of the following documents did the network administrator MOST likely give to the technician?
- a. Process Diagram
 - b. Logical topology Diagram
 - c. Physical Network Diagram
 - d. Fiber Backbone Diagram
43. Which command changes user1's home directory from its default location to /usr/local directory:
- a. `usermod -d /usr/local user1`
 - b. `usermod -a /usr/local user1`
 - c. `usermod -l /usr/local user1`
 - d. `usermod -g /usr/local user1`
44. The linux kernel exists as a file named ____
- a. vmlinuz
 - b. vmlinux
 - c. Kernel
 - d. None of the above
45. What is the purpose of creating partitions on a Linux system?
- a. To organize files alphabetically
 - b. To allocate storage space and organize data
 - c. To install multiple operating systems
 - d. To increase processor speed
46. Which of the following directories is most likely to be placed on a separate hard disk partition?
- a. /bin
 - b. /sbin

- c. /mnt
 - d. /home
47. Where should you install GRUB if your system dual-boots Linux and Windows and you don't want Windows to wipe out GRUB if you reinstall Windows?
- a. The MBR of the first hard disk
 - b. /var/grub.conf
 - c. The boot sector of a logical Linux partition
 - d. The boot sector of a primary Linux partition
48. Which Linux command is used to see the available disk space in each of the partitions in your system?
- a. Disk
 - b. Diskspace
 - c. df
 - d. du
49. User mountable file systems are specified in the following file.
- a. /etc/mtab
 - b. /etc/fstab
 - c. /proc
 - d. /dev
50. Logical drives are contained within what type of partition?
- a. Primary
 - b. Extended
 - c. Swap
 - d. Root
51. To change the sources for apt-get, the _____ file is edited.
- a. sources.list
 - b. apt.sources
 - c. sources.apt
 - d. dpkg.sources
52. Which apt-get parameter updates the available package database?
- a. upgrade
 - b. refresh
 - c. reload
 - d. update
53. The following is the difference between apt-get update and apt-get upgrade
- a. Update command only fetches the latest package information but the latter upgrades the packages
 - b. Update upgrades the packages only but upgrade command upgrades the OS files

- c. Update command downloads the packages but upgrade command upgrades using the downloaded packages
 - d. None of the above
54. In linux, drivers reside in which environment?
- a. Kernel space
 - b. Device space
 - c. Application space
 - d. User space
55. In linux, a device driver can work without the
- a. major number
 - b. minor number
 - c. device file name
 - d. none of the mentioned
56. By default, a Linux user falls under which group?
- a. Staff
 - b. Others
 - c. same as userid (UPG)
 - d. System
57. What is the full form of SSD
- a. Secure Sequential Disk
 - b. Solid State Drive.
 - c. Secure Solid Drive
 - d. Secure Small Disk
58. Which of the following provides the interface to access the services of the operating system?
- a. API
 - b. System call
 - c. Library
 - d. Assembly instruction
59. What does mounting a file system mean
- a. Loading it into the kernel
 - b. Adding it into the Linux directory tree structure
 - c. Giving access to a file system
 - d. All of the above
60. Which of the following is a shortcut key to open a blank document in MS Word
- a. Ctrl + D
 - b. Ctrl + E
 - c. Ctrl + B
 - d. Ctrl + N

61. What is the length (bits) of the IPv4 address?
- a. 8
 - b. 16
 - c. 32
 - d. 128
62. Identify the one which is not part of a OS Kernel
- a. Shell
 - b. System call
 - c. Processor Management
 - d. Memory Management
63. Identify the odd one from the following
- a. 10.10.10.10
 - b. 172.16.10.10
 - c. 192.168.10.10
 - d. 172.168.10.10
64. A packet arrives at a router addressed to 95.80.15.3. The subnet mask used is 255.255.255.248. What is the network broadcast address of the destination network?
- a. 95.80.15.0
 - b. 95.80.15.7
 - c. 95.80.15.248
 - d. 95.80.15.255
65. The Internet Protocol (IPv4) is an example of a
- a. Connectionless network layer protocol
 - b. Connection-oriented network layer protocol
 - c. Connectionless transport layer protocol
 - d. Connection-oriented transport layer protocol
66. What does ICMP primarily handle in IP networks?
- a. Packet encryption
 - b. Error and status messages
 - c. Dynamic IP addressing
 - d. Dynamic routing of packets
67. Which device is responsible for IP forwarding in a network?
- a. Router
 - b. Modem
 - c. Switch
 - d. Hub

68. What is the purpose of a MAC address in a switching table?
- a. Identifying a device on a local network
 - b. Managing IP addresses dynamically
 - c. Controlling access to a network
 - d. None of the above
69. Which protocol is commonly used for learning MAC addresses by a switch?
- a. TCP
 - b. ARP
 - c. DNS
 - d. DHCP
70. Identify a FALSE statement with respect to hub and switch functionality?
- a. Switches can not forward the data when there is a loop between them.
 - b. Hubs broadcast data to all connected devices.
 - c. Hubs rely on MAC addresses for forwarding.
 - d. Switches broadcast data of all unknown devices.
71. What is the default protocol used by the "ping" command?
- a. IP
 - b. IGMP
 - c. TCP
 - d. None of the above
72. What is the function of a DNS server?
- a. To host websites
 - b. To convert domain names to IP addresses
 - c. To manage network security
 - d. To regulate network traffic
73. Identify an odd one from the following.
- a. SMTP
 - b. POP
 - c. HTTP
 - d. IMAP
74. Identify an odd one from the following.
- a. IEEE 802.3
 - b. IEEE 802.4
 - c. IEEE 802.5
 - d. IEEE 802.6

75. Identify an odd one from the following.
- a. netconfig
 - b. Ifconfig
 - c. Ipconfig
 - d. lwconfig
76. Identify the odd one from the following.
- a. SCTP
 - b. FTP
 - c. HTTP
 - d. TCP/IP
77. Identify the odd one from the following.
- a. RIP
 - b. BGP
 - c. ARP
 - d. IP
78. Which file system is commonly used for Windows operating systems?
- a. NTFS
 - b. EXT4
 - c. JFS
 - d. FAT16
79. The purpose of device drivers is _____
- a. To format the hard drive
 - b. To connect to the internet
 - c. To enable communication between the operating system and hardware components
 - d. To install software applications
80. If a computer is assigned an IP address starting with "169.254," what does this indicate?
- a. The computer has a static IP address
 - b. The DHCP server is not available
 - c. The computer is connected to a different subnet
 - d. The network cable is faulty
81. What is the IEEE standard for Wireless LANs that introduced the use of MIMO (Multiple Input Multiple Output) technology?
- a. IEEE 802.11a
 - b. IEEE 802.11b
 - c. IEEE 802.11n
 - d. IEEE 802.11g

82. What is the purpose of the WPA "Pre-Shared Key" (PSK) in a Wi-Fi network?
- a. To authenticate users with a centralized server
 - b. To provide a shared secret for encrypting wireless communication
 - c. To establish a secure connection between the router and the ISP
 - d. To manage IP addresses dynamically
83. Which Wi-Fi standard introduced the use of 5 GHz frequency bands for wireless communication?
- a. 802.11a
 - b. 802.11b
 - c. 802.11g
 - d. 802.11n
84. What is the main advantage of using the 5 GHz band over the 2.4 GHz band in Wi-Fi networks?
- a. Longer range
 - b. Better penetration through walls
 - c. Less interference from other devices
 - d. Lower power consumption
85. What is the recommended approach if you experience interference on a specific Wi-Fi channel?
- a. Increase transmit power
 - b. Change the Wi-Fi standard
 - c. Disable security protocols
 - d. Adjust the channel frequency
86. Which DNS record type is used to map domain names to IPv4 addresses?
- a. A
 - b. MX
 - c. PTR
 - d. AAAA
87. Which of the following is not a role of DHCP in a network?
- a. Assigning IP addresses
 - b. Distributing default gateway information
 - c. Resolving domain names
 - d. Providing subnet mask information

88. On a Linux-based system, what command can be used to release the DHCP lease and request a new one?
- ifconfig renew
 - dhclient -r
 - ipaddr renew
 - dhcp renew
89. In a routing table, what does the "0.0.0.0" destination address represent?
- A reserved IP address
 - The broadcast address
 - A loopback address
 - The default route or gateway
90. If a subnet mask is 255.255.255.128, how many host addresses are available in each subnet?
- 126
 - 128
 - 255
 - 192
91. In network cabling, what does the term "straight-through cable" refer to?
- A cable used for connecting similar devices, like two computers
 - A cable used for connecting devices with different interfaces
 - A cable with connectors crimped on both ends in the same order
 - A cable with connectors crimped on both ends in reverse order
92. If a network cable is subjected to interference from electrical sources, what type of issue might occur?
- Latency
 - Crosstalk
 - Signal attenuation
 - IP address conflict
93. What is the purpose of a loopback plug in cable troubleshooting?
- Test the entire network
 - Test the continuity of a cable by connecting both ends
 - Test the quality of electrical power
 - Test the functionality of a network interface card (NIC)

94. What is the significance of the loopback address in networking?
- a. It represents the default gateway for a device.
 - b. It identifies the DNS server for a network.
 - c. It provides a reserved address for internal use.
 - d. It allows a device to communicate with itself.
95. How is the loopback address represented in CIDR notation?
- a. 127.0.0.1/32
 - b. 0.0.0.0/32
 - c. 0.0.0.0/8
 - d. 127.0.0.0/8
96. What is the maximum data transfer rate supported by CAT6A Ethernet cables?
- a. 100 Mbps
 - b. 1 Gbps
 - c. 10 Gbps
 - d. 100 Gbps
97. What is the primary material used to transmit data in optical fiber cables?
- a. Copper
 - b. Aluminum
 - c. Glass
 - d. Rubber
98. What type of peripheral is a scanner?
- a. Input
 - b. Output
 - c. Storage
 - d. Processing
99. What is the impact of using STP cables on the overall flexibility of the cabling system compared to UTP?
- a. STP cables are more flexible.
 - b. UTP cables are more flexible.
 - c. There is no significant difference in flexibility.
 - d. Both UTP and STP cables have the same flexibility.
100. In which environment is STP cable often preferred due to its shielding properties?
- a. Residential networking
 - b. Industrial settings with high electromagnetic interference
 - c. Short-distance connections
 - d. Outdoor installations