



Question Booklet

Recruitment for the post of Junior Technical Superintendent

Department: Computer Science and Engineering

Level-2 Test

Application No.	:	
Name of the Candidate	:	
Date of Test	:	27 th November 2025

Instructions to Candidates:

- The test booklet comprises 100 objective multiple-choice questions (MCQs).
- Candidates must record all responses exclusively on the OMR answer sheet supplied.
- **Each correct answer is awarded one mark, while 0.25 marks will be deducted for every incorrect response.**
- Answers must be marked using only **BLUE or BLACK ballpoint pens**.
- Ensure that the chosen option is clearly shaded in the **OMR sheet** as per the instructions provided on it. Incomplete or ambiguous markings may lead to rejection of the response.
- No additional sheets will be issued for rough work. Candidates may utilize the space provided within the question booklet for any rough calculations or notes.
- At the end of the examination, candidates must return both the OMR answer sheet and the question booklet to the invigilator. Failure to do so may result in disqualification.
- The total duration of the examination is **150 minutes**.

Signature of the candidate

1. Which of the following command can force all buffers to disk?
 - A. save
 - B. sync
 - C. flush
 - D. edbuff
2. The main Apache configuration file is?
 - A. /etc/httpd/conf/httpd.conf
 - B. /etc/httpd/config.ini
 - C. /etc/httpd/apache.conf
 - D. /etc/system.conf
3. GNU stands for _____.
 - A. Greek Needed Unix
 - B. GNU's Not UNIX
 - C. General Unix
 - D. General Not UNIX
4. Which command is used to display the operating system name
 - A. Wordcount
 - B. Countw
 - C. Uname
 - D. Osuser
5. LILO is _____.
 - A. Linux Lower Order
 - B. Linux Loader
 - C. Linux Leveraging Order
 - D. Linux Limit Order
6. What is FIFO scheduling?
 - A. First input-output scheduling
 - B. First in first out scheduling
 - C. Free input free output
 - D. All of the above
7. What makes an operating system whole?
 - A. Log files
 - B. Input devices
 - C. Output devices
 - D. All of the above
8. The size of virtual memory is based on which of the following
 - A. CPU
 - B. Address Bus
 - C. RAM
 - D. Data Bus

9. Which one of the following isn't considered a real-time operating system?
- A. PSOS
 - B. linuxRT
 - C. VRTX
 - D. Windows
10. Identify the call which never returns an error?
- A. fork
 - B. getpid
 - C. ioctl
 - D. open
11. What is the purpose of memory unit in a computer?
- A. Accepts data
 - B. Displays data
 - C. Process data
 - D. Stores data
12. What is the extension of applet files in control panel
- A. Ctl
 - B. Cpl
 - C. Cal
 - D. Csl
13. Where does the pinned application stayed in Windows OS?
- A. Desktop
 - B. Notification area
 - C. Start button
 - D. Task bar
14. Which character is used to represent a range of value in Linux / DOS
- A. ()
 - B. []
 - C. { }
 - D. < >
15. Which technique prevents invalid data being saved in Access table?
- A. Index
 - B. Filter
 - C. Validation rule
 - D. Input mark
16. Which of the following cable transmits messages in the form of light waves?
- A. STP cable
 - B. UTP cable
 - C. Co-axial cable
 - D. Optical fibre cable

17. What is the main purpose of JavaScript?

- A. Client side validation
- B. Create web browsers
- C. Read and write files
- D. Store data in the server

18. Which open source software is used to upload from client to server or download from server to Client?

- A. PHP
- B. Perl
- C. HTTP
- D. FILEZILLA

19. Which function returns the difference between two date values based on the interval specified in VBA?

- A. Datediff()
- B. Day()
- C. Daydiff()
- D. Datedif()

20. What is the purpose of the last three layers in OSI model?

- A. Common application services
- B. Data presentation within the enduser system
- C. Passing traffic through the network to an end system
- D. Manage the dialogue between end user application process

21. Which layer of OSI network model does repeater work?

- A. Layer 1
- B. Layer 2
- C. Layer 3
- D. Layer 4

22. Which is a network protocol used on the internet or LAN to provide a bidirectional interactive text oriented communication facility using a virtual terminal connection?

- A. FTP
- B. TCP
- C. UDP
- D. Telnet

23. What is the correct term for a link in a switch that is configured to carry traffic for multiple VLANs?

- A. Access link
- B. Trunk link
- C. Hybrid link
- D. Single link

24. What is the main function of a DHCP server in a LAN?
- A. To connect computers to the internet
 - B. To assign IP addresses and other network parameters automatically to devices
 - C. To protect the network from external threats
 - D. To manage the physical cables of the network
25. What command might a network administrator use to allow different ports on a Cisco switch to access a specific VLAN?
- A. interface vlan
 - B. switchport mode trunk
 - C. switchport access vlan [vlan_id]
 - D. no shutdown
26. What type of cable is typically used to connect a PC to a switch in a basic LAN setup?
- A. Crossover cable
 - B. Serial cable
 - C. Straight-through cable
 - D. Coaxial cable
27. What is the technique of memory management called?
- A. Fragmentation
 - B. Storing
 - C. Swapping
 - D. Caching
28. Virtual memory implements the translation of a programs address space to
- A. Virtual addresses
 - B. Physical addresses
 - C. Mapping addresses
 - D. I/O addresses
29. Installed a software update, rebooted, and now the system experiences random crashes. Which utility should you use first to try to fix the problem?
- A. Automated System Restore
 - B. Device Manager
 - C. System Restore
 - D. Recovery Console
30. What command should you run to check and fix corrupt system files, DLLs, and other critical files?
- A. CMDCONS/FIXBOOT
 - B. SFC /SCANNOW
 - C. CHEDSK /R
 - D. DEFRAG -A

31. Which troubleshooting step would you use to revert a specific problematic driver to a previously installed, working version?
- A. System Restore
 - B. Disk Defragmentation
 - C. Driver Rollback
 - D. BIOS Update
32. Which command is used to update the list of available packages from the configured repositories before installing new software with apt-get?
- A. `sudo apt-get upgrade`
 - B. `sudo apt-get install`
 - C. `sudo apt-get update`
 - D. `sudo apt-get refresh`
33. Which file primarily contains the list of software repositories that apt-get uses to find and download packages?
- A. `/etc/dpkg/packages.list`
 - B. `/etc/apt/sources.list`
 - C. `/var/cache/apt/archives/`
 - D. `/usr/local/bin/apt-get.conf`
34. Which file is responsible for the boot loader configuration in Linux?
- A. `/etc/boot.conf`
 - B. `/boot/grub/grub.cfg`
 - C. `/boot/loader.conf`
 - D. `/etc/grub.cfg`
35. Which file contains system-wide environment variables?
- A. `/etc/environment`
 - B. `/etc/profile`
 - C. `/etc/bashrc`
 - D. All of the above
36. Which information does a switch record in its switching table from an incoming frame?
- A. Destination IP address
 - B. Source IP address
 - C. Source MAC address and incoming port number
 - D. Destination MAC address and incoming port number
37. What happens to dynamic entries in a switching table after a certain period of inactivity?
- A. They are converted to static entries.
 - B. They are broadcast to all other switches.
 - C. They are aged out from the table.
 - D. They are re-learned immediately.
38. Which one of the following frame completes the entries in the switching tables?
- A. Acknowledgment Frame
 - B. Routing Frame
 - C. Setup Frame
 - D. Destination Frame

39. ISP – Internet Service Provider networks are connected to one another by private switching stations called

- A. Network Access Points
- B. Peering Points
- C. Routing frames
- D. Regional ISP

40. Virtual-circuit Networks and datagram networks are the sub categories of

- A. Message-switched Networks
- B. Circuit-switched Networks
- C. Packet-switched Networks
- D. Dynamic-switched Networks

41. Which command is used to display the current network connections, routing tables, and a number of other network statistics?

- A. arp
- B. ping
- C. traceroute
- D. netstat

42. Which command is used in windows to query a DNS server to obtain IP address information for a host name, or vice-versa?

- A. ping
- B. traceroute
- C. netstat
- D. nslookup

43. Which command is used (in Windows) to determine the path that packets take to reach a destination, showing the number of hops and the IP addresses of intermediate routers?

- A. pathping
- B. tracert
- C. nslookup
- D. getmac

44. Which exact command is used to down interface eth0 in the Linux operating system?

- A. ifconfig down eth0
- B. ifdown eth0
- C. down eth0
- D. ifconfig -d eth0

45. nslookup stands for?

- A. Network System lookup
- B. Network Server lookup
- C. Name Server lookup
- D. Next Server lookup

46. dig stands for? In Linux

- A. Domain Information Groper
- B. Domain Instruction Gist
- C. Double Instruction Groper
- D. Double Information Groper

47. Which of the following command is used to display and manipulate routing tables in the Linux operating system?

- A. routepath
- B. routetable
- C. route
- D. alterroute

48. Which command is used in Linux OS to check network cable is plugged or not?

- A. ifplugstatus
- B. ifcableplug
- C. ifcablestatus
- D. isplugstatus

49. What does the 'chmod' command do? In Linux

- A. Change file ownership
- B. Change file permissions
- C. Change file name
- D. Change file location

50. _____ uses four twisted-pair cables that connect each station to a common hub.

- A. 10Base5
- B. 10Base2
- C. 10Base-F
- D. 10Base-T

51. Which of the following part of a processor contains the hardware necessary to perform all the operations required by a computer?

- A. Controller
- B. Registers
- C. Cache
- D. Data path

52. Which of the following unit is responsible for converting the data received from the user into a computer understandable format?

- A. Output Unit
- B. Input Unit
- C. Memory Unit
- D. Arithmetic & Logic Unit

53. Which of the following defines the assigned ordering among the characters used by the computer?

- A. Accumulation
- B. Sorting
- C. Collating Sequence
- D. Unicode

54. Gigabit Ethernet access methods include _____ mode.
- A. Half - Duplex
 - B. Full - Duplex
 - C. Neither (A.) nor (B.)
 - D. Both (A.) and (B.)
55. Which of the following is a type of technique in which dumb terminals are connected to a central computer system?
- A. Time Sharing
 - B. Message passing
 - C. Batch environment
 - D. User environment
56. Which of the following is capable of recognizing a pre-specified type of mark by pencil or pen?
- A. OMR
 - B. Winchester
 - C. Bar code reader
 - D. Image Scanner
57. A printer that prints one line at a time and has a predefined set of characters is called
- A. Laser
 - B. Drum
 - C. Inkjet
 - D. Impact
58. The process in which a file is partitioned into smaller parts and different parts are stored in different disks is called _____
- A. RAID
 - B. Mirroring
 - C. Stripping
 - D. RAID classification
59. A device similar to a flash drive _____
- A. Memory card
 - B. Compact drive
 - C. Compact disk
 - D. Memory disk
60. What is the process by which a switch dynamically learns MAC addresses called?
- A. Learning
 - B. Routing
 - C. Flooding
 - D. Filtering
61. _____ refers to the logical structuring of records.
- A. Physical organisation
 - B. Logical organisation
 - C. Structural organisation
 - D. File organisation

62. Which of the following isn't a part of the file directory?
- A. Attributes
 - B. Protocol
 - C. Location
 - D. Ownership
63. DHCP is used for _____
- A. IPv6
 - B. IPv4
 - C. Both IPv6 and IPv4
 - D. None of the mentioned
64. What is at the top of the hierarchy tree of Domains?
- A. .com
 - B. root
 - C. .mil
 - D. .us
65. What service is DHCP an extension of?
- A. BOOTP
 - B. TFTP
 - C. RARP
 - D. DNS
66. In wireless ad-hoc network _____
- A. access point is not required
 - B. access point is must
 - C. nodes are not required
 - D. all nodes are access points
67. What is WPA?
- A. wi-fi protected access
 - B. wired protected access
 - C. wired process access
 - D. wi-fi process access
68. The entire hostname has a maximum of _____
- A. 255 characters
 - B. 127 characters
 - C. 63 characters
 - D. 31 characters
69. What does SSID stand for in a Wi-Fi context?
- A. Service Set Identifier
 - B. System Service Identifier
 - C. Service System Identifier
 - D. System Set Identifier

70. What is the main purpose of HTTPS instead of HTTP?

- A. To prevent malware infections
- B. To make the website load faster
- C. To encrypt data during transmission to prevent interception
- D. To block specific IP addresses

71. When fraud access points are created to access information such as passwords. Which type of Wireless network threat would you classify this under?

- A. Identity Theft
- B. Network Injection
- C. Man in the middle attack
- D. Malicious Association

72. The frequency range of WI-FI is around _____

- A. 2.4 GHz and 5GHz
- B. 2.9 GHz and 5 GHz
- C. 3.4 GHz and 5GHz
- D. 4.4 GHz and 5GHz

73. The throughput of the IEEE 802.11ac wave 1 is around _____

- A. Up to 1.3Gbps
- B. 60Mbps
- C. 70Mbps
- D. 72 Mbps

74. In how many ways does a wireless LAN can be configured?

- A. One
- B. Two
- C. Three
- D. Four

75. What is the latest standard of Wi-Fi?

- A. IEEE 802.11be
- B. IEEE 802.11ac
- C. IEEE 802.11ax
- D. IEEE 802.11b

76. Which one of the following is the default PHP session name?

- A. PHPSESSIONID
- B. PHPIDSESS
- C. PHPSESSID
- D. PHPSESID77

77. Which of the following is a social engineering attack often used to steal login credentials and credit card numbers?

- A. Pharming
- B. SQL Injection
- C. Phishing
- D. Cross-Site Scripting (XSS)

78. Which one of the following function checks for the existence of DNS records?
- A. checkdns()
 - B. checkdnssr()
 - C. checkdnssrr()
 - D. checkdnrsa()
79. Which one of the following function returns the port number of a specified service?
- A. getportname()
 - B. getservername()
 - C. getserverbyname()
 - D. getservbyname()
80. Which one of the following methods can be used to diagnose and display information about a MySQL connection error?
- A. connect_errno()
 - B. connect_error()
 - C. mysqli_connect_err()
 - D. mysqli_connect_error()
81. If there is no error, then what will the error() method return?
- A. TRUE
 - B. FALSE
 - C. Empty String
 - D. 0
82. Which one of the following methods recuperates any memory consumed by a result set?
- A. destroy()
 - B. mysqli_free_result()
 - C. alloc()
 - D. free()
83. Which of the following PHP function is commonly used when handling authentication via PHP? i) header() ii) footer() iii) inset() iv) isset()
- A. i) and iv)
 - B. ii) and iv)
 - C. ii) and iii)
 - D. i) and iii)
84. The name of the web site
- A. Index
 - B. Domain
 - C. Resource
 - D. Home
85. A collection of 8-bit is called
- A. Double-word
 - B. Word
 - C. Byte
 - D. Nibble

86. In Data processing what does the abbreviation SAP stands for?
- A. System, Application, Products
 - B. Sales, Allocation, Purchase
 - C. Systems, Authorizations, Programs
 - D. Systems, Algorithms, Processes
87. Which of the following is not a Two-Dimensional Diagram?
- A. Square diagram
 - B. Pie diagram
 - C. Rectangular diagram
 - D. Histogram
88. The analytic-induction strategy is method of
- A. Quantitative analysis
 - B. Qualitative analysis
 - C. Field observation
 - D. Participatory analysis
89. Quantitative and Qualitative are types of ____.
- A. Data
 - B. Information
 - C. Database
 - D. None of the above mentioned
90. Processed data is known as ____.
- A. Information
 - B. Data
 - C. Both A and B
 - D. None of the above mentioned
91. What is the standard format and length of an IPv4 address?
- A. 64 bits
 - B. 32 bits
 - C. 28 bits
 - D. 256 bits
92. How many bits are in an IPv6 address?
- A. 32 bits
 - B. 64 bits
 - C. 128 bits
 - D. 256 bits
93. What is the default subnet mask for a class C network?
- A. 255.0.0.0
 - B. 255.255.255.0
 - C. 127.0.0.1
 - D. 255.255.0.0

94. Which part of the data processing cycle involves presenting the processed information to the user?
- A. Input
 - B. Processing
 - C. Storage
 - D. Output
95. The compilation of data that is arranged for better and faster retrieval and is accessed via computers is known as
- A. Browsing
 - B. Intranet
 - C. Internet
 - D. Online Database
96. The database security issue that is concerned with improper denial of access to information is known as
- A. Disclosure
 - B. Availability
 - C. Privacy
 - D. Secrecy
97. The Central Processing Unit (CPU) is involved in which part of the data processing cycle?
- A. Input
 - B. Processing
 - C. Output
 - D. Storage
98. Which type of data processing involves handling large volumes of data at predetermined times, such as overnight?
- A. Real-time processing
 - B. Online processing
 - C. Batch processing
 - D. Distributed processing
99. What principle does an optical fiber cable use for data transmission?
- A. Refraction
 - B. Diffraction
 - C. Total internal reflection
 - D. Absorption
100. Which type of fiber optic cable is used for long-distance communication due to its low signal loss and high bandwidth?
- A. Multimode step-index fiber
 - B. Multimode graded-index fiber
 - C. Single-mode fiber
 - D. Coaxial cable