



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

- Network Access Points
- Peering Points
- Routing frames
- Regional ISP

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

- Message-switched Networks
- Circuit-switched Networks
- Packet-switched Networks
- Dynamic-switched Networks

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

- arp
- ping
- traceroute
- 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?

- ping
- traceroute
- netstat
- 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?

- pathping
- tracert
- nslookup
- getmac

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

- ifconfig down eth0
- ifdown eth0
- down eth0
- ifconfig -d eth0

45. nslookup stands for?

- Network System lookup
- Network Server lookup
- Name Server lookup
- Next Server lookup

46. dig stands for? In Linux

- Domain Information Groper
- Domain Instruction Gist
- Double Instruction Groper
- 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. PHPSESSID77

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. checkdnsr()
- C. checkdnsrr()
- D. checkdnsa()

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 issued 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