

SCHOOL OF PLANNING AND ARCHITECTURE, BHOPAL

Written Test for the post of Technical Assistant

Date of Examination: 09/01/2024

Max. Marks. 80

Duration: 1.5 hours

Name of the Candidate:

Roll no. of the candidate:

INSTRUCTIONS

1. Mark 'Cross' (X) for your selected option on the answer sheet provided along with the question paper.
2. If more than one option is marked for a question using 'Cross' (X), that question/answer will not be considered for evaluation
3. Ensure that the symbol 'Cross' (X) does not cross the box.
4. Write 'Cross' (X) legibly and clearly.
5. No other symbol apart from 'Cross' (X) shall be used for indicating your answer.
6. Your answer shall not be considered for evaluation if any other symbol apart from 'Cross' (X) is used.
7. Do not make any mark/drawing or markings on the question/answer sheet.
8. No candidate shall be permitted to leave the Examination Room/ Hall before the end of the examination.
9. Question/ Answer sheet will not be given back once the candidate submits the sheet.
10. There will be no negative marking for wrong answers.
11. Use only Black/ Blue Ball Point pen(s) for marking your option.
12. Mobile phones, electronic gadgets/materials are not allowed inside the examination Hall.
13. A separate sheet (page nos. 12 & 13) have been provided for rough work. No rough work is allowed on the question/ answer sheet or any other paper other than the allocated space.
14. Furnish all information required on the question booklet such as Roll Number, Name of the candidate and signature, failing which the question booklet will not be evaluated. The candidate shall write only their Roll Number on the answer sheet.
15. Each question shall carry one mark.
16. A candidate must fill the number of boxes given at the end of the Answer sheet.

Total no. of pages: 13

Questions attempted out of 80: ____

Signature of the candidate

Signature of the Invigilator

PART - A

1. What is the correct set, if Blind : Light ?
A. Deaf : Language
B. Dumb : Speech
C. Vibration : Voice
D. Sound : Tounge
2. An empty bucket 'A' can be filled with the water in 6 mintues. There is another but same bucket 'B' which gets empty in 12 minutes, due to the hole at the bottom. How much time it will take to fill the bucket 'B'?
A. 10 minutes
B. 16 minutes
C. 12 minutes
D. 11 minutes
3. What is the name of the historical sites earned the title of 8th wonder of the world?
A. Angkor Wat
B. Taj Mahal
C. The Kailasa Temple
D. Machu Pichu
4. Which is the active voice sentence of the following – “The section 2b statement is approved by the DG.”
A. The DG approves the section 2b statement.
B. The DG did approve the section 2b statement.
C. The DG approve the section 2b statement.
D. The statement section 2b approves the DG.
5. Select the option that can be used as a one-word substitute for the given sentence. “Something that is to your advantage but happened by chance.”
A. Occidental
B. Purposeful
C. Deliberate
D. Fortuitous
6. If the sum of the roots of the quadratic equation $kx^2 + 2x + 3k = 0$ is equal to their product, the value of k is:
A. $1/3$
B. $-1/3$
C. $2/3$
D. $-2/3$
7. Which state of India does not share its boundary with Myanmar?
A. Arunachal Pradesh
B. Mizoram
C. Manipur
D. Sikkim
8. Chandrayan 3 is landed on the moon on August 23, 2023. What name is given to the Chandrayaan 3 landing spot?
A. Jawahar Sthal Point
B. Tiranga Point
C. Shiva-Shakti Point
D. Shiva-Shambhu Point

9. Select the option that is closest in meaning to the underlined idiom/phrase in the given sentence.

Please cut down on your expenses now or you will face difficulties in the future.

- A. Recover B. Raise C. Refuse D. Reduce

10. Which of the following equations represents a line passing through the origin?

- A. $3x - 2y + 5 = 0$ B. $4x - 9y - 4 = 0$ C. $2x - 3y = 0$ D. $y = -6$

11. Who among the following foreign travelers visited India first?

- A. Hiuntsang B. Fahien C. Itsing D. Megasthenes

12. BECD, FIGH, KNLM, _____, XAYZ

- A. PSQR B. QTRS C. QWSU D. ORPQ

13. What is the synonym of the word "Defer"?

- A. Indifferent B. Defy C. Differ D. Postpone

14. Find the area of a square, one of whose diagonals is 3.8 m long?

- A. 7.22 B. 6.22 C. 5.76 D. 7.98

15. Priyank is Akshay's brother. Sonia is Saksham's sister. Akshay is Sonia's son. How is Priyank related to Sonia?

- A. Son B. Father C. Nephew D. Grandson

16. Which of the following adjectives is NOT a part of the Preamble?

- A. Liberty B. Tolerant C. Sovereign D. Secular

17. Identify the grammatically correct sentence:

- A. The team haven't decided yet whether they're going to participate in the upcoming tournament.
B. Each of the students were required to submit their assignment by yesterday.
C. Neither the teacher nor the students is aware of the surprise quiz tomorrow.
D. The group of friends was playing volleyball in the park when it started to rain.

18. Given a Series -10, -8, 6, 40, 102, ?

Find what numbers would come in place of the question mark(?).

- A. 105 B. 117 C. 216 D. 129

19. In a certain code, COMPUTER is written as PMOCRETU, how is DECIPHER written in that code?

- A. ICEDREHP B. ICDEHPER C. CDEIERHP D. CDIERHEP

20. A man walks 5 km toward south and then turns to the right. After walking 3km he turns to the left and walks 5 km. Now in which direction is he from the starting place?

- A. West B. South C. North-East D. South-West

PART - B

21. What is the shortcut key for the central alignment of a line or text in MS Office software?
A. Ctrl + E
B. Ctrl + A
C. Ctrl + C
D. Ctrl + G
22. 'Nibble' in computer terminology is called _____?
A. Bit
B. Half Bit
C. Byte
D. Half Byte
23. If you want to connect to your own computer through the Internet from another location, you can use?
A. e-mail
B. FTP
C. Telnet
D. instant message
24. _____ is a technique that is used to send more than one call over a single line?
A. Digital transmission
B. Infrared transmission
C. Digitizing
D. Multiplexing
25. In a synchronous modem, the digital-to-analog converter transmits signal to the ?
A. equalizer
B. modulator
C. demodulator
D. terminal
26. A _____ typically connects personal computers within a very limited geographical area, usually within a single building?
A. LAN
B. MAN
C. TAN
D. NAN
27. A hard disk drive is considered as a _____ storage?
A. Flash
B. Non volatile
C. temporary
D. non-permanent
28. A (n) _____ appearing on a web page opens another document when clicked ?
A. anchor
B. URL
C. hyperlink
D. reference
29. A tuple is a _____?
A. Column of a table
B. Two-dimensional table
C. row of a table
D. key of a table

30. What is the full name of FAT?
- A. File attribute table
 - B. File allocation table
 - C. Font attribute table
 - D. Format allocation table
31. Where are the errors and bugs recorded?
- A. Notepad
 - B. Logfile
 - C. Running process
 - D. New program
32. What is a data structure?
- A. A programming language
 - B. A collection of algorithms
 - C. A way to store and organize data
 - D. A type of computer hardware
33. Find the output of C program
- ```
#include<stdio.h>
int main()
{
int i;
for(i = 0; i<=3;i++);
printf(“%d”,i);
return 0;
}
```
- A. 1 2 3
  - B. 4
  - C. 3
  - D. 1 2 3 4
34. A localhost can be written as -
- A. 127.0.0.1
  - B. 192.168.0.1
  - C. 1.1.1.1
  - D. 192.255.255.255
35. There are multiple buildings in the institute campus network. The requirement is to arrange the computer resource sharing and communication between two buildings which are on different network. Idea to solve this ?
- A. By viewing the network performance
  - B. By creating a bridge between the network connections
  - C. By repairing TCP/IP configuration
  - D. By adding wireless computer to the network

36. When trying to access a URL, the following message is displayed on the browser:  
Server ; Error 403  
What could be the reason for the message?
- A. The requested HTML file is not available
  - B. The URL refers to a CGI script and the header of the script does not indicate where the interpreter is located
  - C. The path to the interpreter of the script file is invalid
  - D. The requested HTML file or CGI script has insufficient permission
37. Which feature allows to create and send same letter to different people?
- A. All the options are wrong
  - B. Insert + F5
  - C. Mail Merge
  - D. Macros
38. What is the Binary value of 256?
- A. 10101010
  - B. 10000000
  - C. 11001010
  - D. 00001001
39. Group \_\_\_\_\_ contains the graphical file extensions:
- A. Group A->JPG, CPX, GCM
  - B. Group B->GIF, TCE, WMF
  - C. Group C-> TCP,JPG, BMP
  - D. Group D-> JPG, GIF, BMP
40. A compute program which is designed to take advantage of known vulnerabilities?
- A. Root Kit Program
  - B. Sniffer Program
  - C. Vulnerability Scanner
  - D. Security Exploit Programs
41. What is "Miracast"?
- A. Wireless Content Streaming Technology
  - B. Browser feature to cast content side by side
  - C. A banking feature to provide safe transactions facility
  - D. None of the above
42. On a LINUX OS, the directory on which a user is working currently can be found by which command?
- A. pwd
  - B. ls-a
  - C. ls
  - D. dir



53. What is the role of the CPU cache memory?
- A. Storing long-term data
  - B. Storing frequently used instructions and data for faster access
  - C. Cooling the CPU
  - D. Managing peripherals
54. The speed of a modern printer is generally measured in \_\_\_\_\_.
- A. LPS
  - B. PPM
  - C. PPS
  - D. DPI
55. EBCDIC stands for-
- A. Extended Binary Coded Decimal Interchange Code
  - B. Extended Bit Code Decimal Interchange Code
  - C. Extended Bit Case Decimal Interchange Code
  - D. Extended Binary Case Decimal Interchange Code
56. A term associated with the comparison of processing speed of different computer system is \_\_\_\_\_.
- A. EFTS
  - B. MPG
  - C. MIPS
  - D. CPS
57. What is the primary purpose of device drivers in the context of hardware installation?
- A. Enhance hardware aesthetics
  - B. Facilitate communication between hardware and operating system
  - C. Improve hardware durability
  - D. Boost hardware processing speed
58. Which type of software installation allows users to choose specific features and components to install or exclude?
- A. Express installation
  - B. Custom installation
  - C. Default installation
  - D. Automated installation
59. In a RAID (Redundant Array of Independent Disks) setup, what is the primary benefit of RAID 5?
- A. Improved performance
  - B. Data redundancy
  - C. Increased storage capacity
  - D. Network redundancy
60. When installing hardware components, what is a common reason to consult the product documentation?
- A. Verify software compatibility
  - B. Access warranty information
  - C. Troubleshoot installation issues
  - D. Determine system resource requirements
61. Which type of system bus is responsible for connecting the CPU to memory?
- A. Address Bus
  - B. Control Bus
  - C. Data Bus
  - D. Expansion Bus

62. What is the purpose of BIOS (Basic Input/Output System) in a computer?  
 A. Manage software updates                      C. Boot the operating system  
 B. Control input devices                         D. Allocate system resources
63. Which of the following is a unique numerical label assigned to each device on a network for identification?  
 A. IP Address                                         C. DNS  
 B. URL                                                 D. HTTP
64. Which network topology connects all devices in a linear sequence, and if one device fails, the entire network is affected?  
 A. Star Topology                                    C. Ring Topology  
 B. Bus Topology                                     D. Mesh Topology
65. In a TCP/IP network, which layer is responsible for logical addressing and routing?  
 A. Network Layer                                  C. Data Link Layer  
 B. Transport Layer                                 D. Application Layer
66. When assembling a computer, what is the purpose of the power supply unit (PSU)?  
 A. Store data permanently  
 B. Convert electrical power from an outlet into usable power for the computer  
 C. Control the flow of data between the CPU and other components  
 D. Manage network connections
67. In the context of user interfaces, what does GUI stand for?  
 A. Graphical User Interface                      C. Global Utility Integration  
 B. General User Interaction                      D. Grouped User Interface
68. What safety measure should be followed before cleaning the inside of a computer case?  
 A. Use a damp cloth                                C. Wear gloves  
 B. Disconnect the power source                 D. Increase the room humidity
69. Consider the Boolean function  $F = ABC + ABC' + A'C$ , the simplified function of F is  
 A.  $AB + A'C$                                         C.  $ABC'$   
 B.  $AB + AC'$                                         D.  $ABC$
70. What will be the 2's complement of the binary number 1101100?  
 A. 0010011                                         C. 1101101  
 B. 0010100                                         D. 0010010
71. What is the following register used to hold the address of the next instruction?  
 A. Memory Address Register                      C. Instruction Register  
 B. Program Counter                                D. Accumulator

72. A small and fast memory that keeps most frequently accessed instructions, data and reduces the average memory access time is called:
- A. Register  
B. Cache Memory  
C. Random Access Memory (RAM)  
D. Virtual Memory
73. Which of the following pair of registers must have the same size?
- A. Data Register, Program counter  
B. Accumulator, Program counter  
C. Address register, Data register  
D. Address register, Program counter
74. How many Bytes are there in the 1 Giga Byte (GB)?
- A.  $2^{20}$   
B.  $2^{30}$   
C.  $2^{40}$   
D.  $2^{50}$
75. A CPU scheduler which invokes very fast or frequently is called:
- A. Fast Scheduler  
B. Short term Scheduler  
C. Long term Scheduler  
D. Medium term Scheduler
76. Which of the following page replacement algorithms suffers from Belady's Anomaly?
- A. Optimal Replacement  
B. FIFO  
C. LRU  
D. Both optimal and FIFO
77. A program that translates the High-level language program into the Machine language is called \_\_\_\_\_?
- A. Assembler  
B. Compiler  
C. Linker  
D. Loader
78. What is the primary function of Windows Control Panel in software management?
- A. To uninstall the software  
B. To activate the software  
C. To configure system settings and manage installed software  
D. To update the software
79. Which of the following is not the valid IP address in IPv4?
- A. 192.168.16.5  
B. 240.168.15.16  
C. 192.195.284.16  
D. 247.230.192.199
80. Which of the following is useful in traversing a given graph by breadth first search?
- A. Stack  
B. Set  
C. List  
D. Queue

**SCHOOL OF PLANNING AND ARCHITECTURE, BHOPAL**

Written Test for the post of Technical Assistant

Date of Examination: 09/01/2024

**ANSWER SHEET**

**ROLL NUMBER OF THE CANDIDATE:**

|    |   |   |   |   |
|----|---|---|---|---|
| Q. |   |   |   |   |
| 1  | A | B | C | D |
| 2  | A | B | C | D |
| 3  | A | B | C | D |
| 4  | A | B | C | D |
| 5  | A | B | C | D |
| 6  | A | B | C | D |
| 7  | A | B | C | D |
| 8  | A | B | C | D |
| 9  | A | B | C | D |
| 10 | A | B | C | D |
| 11 | A | B | C | D |
| 12 | A | B | C | D |
| 13 | A | B | C | D |
| 14 | A | B | C | D |
| 15 | A | B | C | D |
| 16 | A | B | C | D |
| 17 | A | B | C | D |
| 18 | A | B | C | D |
| 19 | A | B | C | D |
| 20 | A | B | C | D |

|    |   |   |   |   |
|----|---|---|---|---|
| Q. |   |   |   |   |
| 21 | A | B | C | D |
| 22 | A | B | C | D |
| 23 | A | B | C | D |
| 24 | A | B | C | D |
| 25 | A | B | C | D |
| 26 | A | B | C | D |
| 27 | A | B | C | D |
| 28 | A | B | C | D |
| 29 | A | B | C | D |
| 30 | A | B | C | D |
| 31 | A | B | C | D |
| 32 | A | B | C | D |
| 33 | A | B | C | D |
| 34 | A | B | C | D |
| 35 | A | B | C | D |
| 36 | A | B | C | D |
| 37 | A | B | C | D |
| 38 | A | B | C | D |
| 39 | A | B | C | D |
| 40 | A | B | C | D |

|    |   |   |   |   |
|----|---|---|---|---|
| Q. |   |   |   |   |
| 41 | A | B | C | D |
| 42 | A | B | C | D |
| 43 | A | B | C | D |
| 44 | A | B | C | D |
| 45 | A | B | C | D |
| 46 | A | B | C | D |
| 47 | A | B | C | D |
| 48 | A | B | C | D |
| 49 | A | B | C | D |
| 50 | A | B | C | D |
| 51 | A | B | C | D |
| 52 | A | B | C | D |
| 53 | A | B | C | D |
| 54 | A | B | C | D |
| 55 | A | B | C | D |
| 56 | A | B | C | D |
| 57 | A | B | C | D |
| 58 | A | B | C | D |
| 59 | A | B | C | D |
| 60 | A | B | C | D |

|    |   |   |   |   |
|----|---|---|---|---|
| Q. |   |   |   |   |
| 61 | A | B | C | D |
| 62 | A | B | C | D |
| 63 | A | B | C | D |
| 64 | A | B | C | D |
| 65 | A | B | C | D |
| 66 | A | B | C | D |
| 67 | A | B | C | D |
| 68 | A | B | C | D |
| 69 | A | B | C | D |
| 70 | A | B | C | D |
| 71 | A | B | C | D |
| 72 | A | B | C | D |
| 73 | A | B | C | D |
| 74 | A | B | C | D |
| 75 | A | B | C | D |
| 76 | A | B | C | D |
| 77 | A | B | C | D |
| 78 | A | B | C | D |
| 79 | A | B | C | D |
| 80 | A | B | C | D |

Total questions attempted by the Candidate: \_\_\_\_\_

Number of answers marked more than one option: \_\_\_\_\_

I hereby declare that the information given above is correct.

Signature of the Candidate \_\_\_\_\_

Signature of the Invigilator \_\_\_\_\_

Note: All candidates were awarded marks for Question No. 38 of the question paper.