

THE GAUHATI HIGH COURT AT GUWAHATI

(The High Court of Assam, Nagaland, Mizoram and Arunachal Pradesh)

Written Examination (objective type multiple choices) for direct recruitment of **Technical Assistant** in the Principal Seat of the Gauhati High Court.

Date: **31.10.2021(Sunday)**

Time: **10:00 am to 12:00 noon**

Total marks: **120**

Duration: **2 hours**

All questions are compulsory. Each question carries 1 mark. There is no negative marking.

1. The number of times the following for-loop will be executed is for (int i = 4; i < 10; i+=2)
if ((i % 4)) break;

(a) 2 (b) 1 (c) 10 (d) 9
2. Which Protocol is used to send and receive electronic mail.

a. Simple Mail Transition Protocol
b. Simple Mail Transfer Protocol
c. Simple Mail Terminal Protocol
d. Simple Mail Transport Protocol
3. A data structure where elements can be added or removed at either end but not in the middle is

(a) Linked lists (b) Stacks (c) Queues (d) Deque
4. Which of the following is a two-way list?

(a) stack
(b) circular linked list
(c) singly linked list with pointers to the first and the last nodes
(d) none of above
5. The worst case occurs in linear search algorithm when

(a) Item is somewhere in the middle of the array
(b) Item is not in the array at all
(c) Item is the last element in the array
(d) Item is the last element in the array or is not there at all

6. The complexity of merge sort algorithm is
- (a) $O(n)$ (b) $O(\log n)$ (c) $O(n^2)$ (d) $O(n \log n)$
7. The IP network 192.168.50.0 is to be divided into 10 equal sized subnets. Which of the following subnet masks can be used for the above requirement?
- a. 255.243.240
b. 255.255.0.0
c. 255.255.255.0
d. 255.255.255
8. The location of a resource on the internet is given by its?
- a. Protocol
b. URL
c. E-mail address
d. ICQ
9. What kind of transmission medium is most appropriate to carry data in a computer network that is exposed to electrical interferences?
- a. Unshielded twisted pair
b. Optical fiber
c. Coaxial cable
d. Microwave
10. A proxy server is used as the computer?
- a. with external access
b. acting as a backup
c. performing file handling
d. accessing user permissions

11. With 2's complement representation using 8 bits the maximum integer that can be represented is
- (a) 255 (b) 256 (c) 128 (d) 127
12. In the worst case, minimum number of comparisons required to merge two sorted lists of n elements is
- (a) $2n - 1$ (b) $2n$ (c) $n + 1$ (d) $2n + 1$
13. Minimum number of comparisons needed to find the minimum of n elements is
- (a) $2n$ (b) $n + 1$ (c) $n - 1$ (d) n
14. Which of the following could possibly be the result of in-order traversal applied on a binary search tree?
- (a) 4 15 20 18 10 (b) 20 18 15 10 4
(c) 4 10 15 18 20 (d) 20 18 10 8 4
15. The number of rows in the truth table of the logical expression $a \vee \neg b \wedge c$ is
- (a) 3 (b) 8 (c) 16 (d) 6
16. The worst case running time of quick sort is
- (a) $n \lg n$ (b) n^2 (c) $\lg n$ (d) $n^2 \lg n$
17. Parameter passing technique(s) used in C language in function calls is(are)
- (a) call-by-value
(b) call-by-reference
(c) Both call by value and call by reference
(d) call by pointers

18. Two consecutive bytes in memory hold the ASCII codes of the letters A and H in binary format. What binary number does the resultant 16-bits represent?
- (a) 0 1 0 0 0 0 0 1 1 1 0 0 1 0 0 0
 - (b) 1 1 0 0 0 0 0 1 0 1 0 1 0 0 1 0
 - (c) 0 1 0 0 0 0 0 1 0 1 0 0 1 0 0 0
 - (d) 1 1 0 0 0 0 0 1 1 1 0 0 1 0 0 1
19. Which of the following statements is true regarding constructors and destructors of a class in C++?
- (a) It can have any number of constructors and destructors.
 - (b) It can have any number of constructors and at most one destructor.
 - (c) It can have at most one constructor and at most one destructor.
 - (d) It can have at most one constructors and any number of destructors.
20. From the following sorting algorithms choose the one that is not a stable sorting algorithm.
- (a) Bubble sort
 - (b) Insertion sort
 - (c) Selection sort
 - (d) Merge sort
21. If the number .005998 is rounded off to three decimal places then the absolute and relative errors are respectively
- (a) .000002 and .00033344
 - (b) -.000002 and .0033344
 - (c) .000002 and .33344
 - (d) -.000002 and .0003334
22. Which of the following is a normalized floating point number in base 2 system?
- (a) .11011E01
 - (b) .00111E02
 - (c) .00011E03

(d) .01100E01

23. Which one of the following software prevents the external access to a system?
- a) Firewall
 - b) Gateway
 - c) Router
 - d) Virus Checker
24. Hamming code is a method of
- a) Error detection
 - b) Error correction
 - c) Error encapsulation
 - d) Both A & B.
25. A logic circuit that gates one out of several inputs to single output is known as a
- (a) Flip-flop
 - (b) Decoder
 - (c) Encoder
 - (d) Multiplexer
26. What output will be produced by the following code in C?
- ```
int n1 = 10, n2, n3; n3 = n1 >= 5 ? n2 = 100 : n2 = 200; printf("\ % d %d ", n2, n3);
```
- (a) 100 100
  - (b) 5 100
  - (c) 10 10
  - (d) 100 -100
27. The term FTP stands for?
- a. File transfer program
  - b. File transmission protocol
  - c. File transfer protocol
  - d. File transfer protection

28. For which one of the following operations operating on a list of elements, array structure is more efficient than linked-list structure?
- (a) inserting an element
  - (b) deleting an element
  - (c) accessing the i-th element
  - (d) searching for an element.
29. The maximum length (in bytes) of an IPv4 datagram is?
- a. 32
  - b. 1024
  - c. 65535
  - d. 512
30. The number of selection bits requires for selecting one out of 32 inputs is
- (a) 6
  - (b) 5
  - (c) 32
  - (d) 16
31. A logic circuit that accepts one input and distributes it over several outputs is a
- (a) Flip-flop
  - (b) Demultiplexer
  - (c) Encoder
  - (d) Multiplexer
32. The number of processes completed per unit time is known as \_\_\_\_\_.
- a) Output
  - b) Throughput
  - c) Efficiency
  - d) Capacity
33. Switching the CPU to another Process requires to save state of the old process and loading new process state is called as \_\_\_\_\_.
- a) Process Blocking
  - b) Context Switch
  - c) Time Sharing
  - d) None of the above

34. Routine is not loaded until it is called. All routines are kept on disk in a relocatable load format. The main program is loaded into memory & is executed. This type of loading is called \_\_\_\_\_
- a) Static loading
  - b) Dynamic loading
  - c) Dynamic linking
  - d) Overlays
35. In cycle redundancy checking, the divisor is ----- the CRC.
- a) same size as
  - b) One bit less than
  - c) One bit more than
  - d) Two bits more than
36. Which type of topology is best suited for large businesses which must carefully control and coordinate the operation of distributed branch outlets?
- a. Ring
  - b. Local area
  - c. Hierarchical
  - d. Star
37. If the Disk head is located initially at 32, find the number of disk moves required with FCFS if the disk queue of I/O blocks requests are 98,37,14,124,65,67.
- a) 310
  - b) 324
  - c) 315
  - d) 321
38. Which of the following registers is used to keep track of address of the memory location where the next instruction is located?

- a) Memory Address Register
  - b) Memory Data Register
  - c) Instruction Register
  - d) Program Register
39. Open Shortest Path First (OSPF) is also called as \_\_\_\_\_
- a) Link state protocol
  - b) Error-correction protocol
  - c) Routing information protocol
  - d) Border gateway protocol
40. The page replacement algorithm which gives the lowest page fault rate is
- a) LRU
  - b) FIFO
  - c) Optimal page replacement
  - d) Second change algorithm
41. The optimal scheduling algorithm is
- a) FCFS
  - b) SJF
  - c) RR
  - d) Multilevel Queue scheduling
42. Which of the following command is used to check Linux version?
- a) kernel
  - b) `uname -a`
  - c) `uname -n`
  - d) `uname -s`
43. Which of the following statements is true?
- (a) A parallel run involves two different terminals accessing a common database



- (b) Computers are essential for Systems Analysis
- (c) Flow of information in an organization is always vertical
- (d) A system flowchart is not a part of a program documentation package

44. In OSPF, which protocol is used to discover neighbor routers automatically?
- a) Link state protocol
  - b) Error-correction protocol
  - c) Routing information protocol
  - d) Hello protocol
45. A Web page is located using a
- a. Universal Record Link
  - b. Uniform Resource Locator
  - c. Universal Record Locator
  - d. Under Reach Links
46. In OSPF header, which field is used to detect errors in the packet?
- a) Type
  - b) Area ID
  - c) Authentication type
  - d) Checksum
47. HTML is a subset of \_\_\_\_\_
- a) SGMD
  - b) SGML
  - c) SGMH
  - d) None of the above
48. Which of the following provides the ability to query information from the database and insert tuples into, delete tuples from, and modify tuples in the database?
- a. DML(Data Manipulation Language)

- b. DDL(Data Definition Language)
  - c. Query
  - d. Relational Schema
49. Which of the following is generally used for performing tasks like creating the structure of the relations, deleting relation?
- a. DML(Data Manipulation Language)
  - b. Query
  - c. Relational Schema
  - d. DDL(Data Definition Language)
50. How long is an IPv6 address?
- a. 32 bits
  - b. 128 bytes
  - c. 64 bits
  - d. 128 bits
51. What are the two main types of access control lists (ACLs)?
- 1.Standard 2.IEEE 3.Extended 4.Specialized
- a. 1 and 3
  - b. 2 and 4
  - c. 3 and 4
  - d. 1 and 2
52. You have 10 users plugged into a hub running 10Mbps half-duplex. There is a server connected to the switch running 10Mbps half-duplex as well. How much bandwidth does each host have to the server?
- a. 100 kbps
  - b. 1 Mbps
  - c. 2 Mbps

- d. 10 Mbps
53. How does a DHCP reservation identify with its target client machines?
- a) By the clients DNS name
  - b) By the clients Host name
  - c) By the clients MAC address
  - d) By the clients IP address
54. A computer that is joined to a Windows Domain also needs its Workgroup to be configured.
- a) Statement is True
  - b) Statement is False
  - c) Statement is partly True
  - d) None of option a, b & c
55. When it comes to Windows Domains, what does DC stand for?
- a) Dynamic Computer
  - b) Domain Computer
  - c) Domain Controller
  - d) None of the above
56. What is a Windows Domain?
- a) A large (or small) number of computers managed by a Domain Controller
  - b) A large number of printers managed by a single server
  - c) A large (or small) number of Windows Servers
  - d) None of the above
57. If you Host computer has 8 GB of RAM, How many VMs can you simultaneously run at full capacity with 3 GB of RAM each?
- a) Only one VM
  - b) Only two VMs
  - c) Only three VMs

d) As many VMs as you want because they are virtual

58. When it comes to virtualization, what is a Guest?

- a) A computer that hosts Guest VMs
- b) A Virtual Machine is often referred to as a Guest
- c) A VM that hosts other VMs
- d) A temporary VM that must eventually leave its host

59. Which command creates a new shell?

- (a) ah
- (b) oh
- (c) ch
- (d) sh

60. Which key should be pressed to save a file in line editing mode?

- (a) x
- (b) s
- (c) n
- (d) w

61. Which command allows you to change a word?

- (a) co
- (b) dd
- (c) dw
- (d) cw

62. A directory under a directory is called as

- (a) root directory
- (b) parent directory
- (c) sub directory
- (d) child directory

63. Which command will undo the last modification?
- (a) o
  - (b) n
  - (c) u
  - (d) d
64. Double dot (..) with **cd** refers to
- (a) created directory
  - (b) current directory
  - (c) parent directory
  - (d) change directory
65. Maximum how long can a Linux filename be?
- a) 128 bytes
  - b) 255 bytes
  - c) 32 bytes
  - d) 64 bytes
66. Which combination of keys is used to exit from terminal?
- a) Ctrl + t
  - b) Ctrl + z
  - c) Ctrl + d
  - d) Ctrl + e
67. Which command(s) is/are used to get help about a command in Linux?
- a) info
  - b) man
  - c) None of these
  - d) Both a and b

68. Which command is used to get the kernel version in Linux?

- a) `uname -r`
- b) `kernel`
- c) `uname -n`
- d) `uname -s`

69. Which command is used to list all the files in your current directory (including hidden)?

- a) `ls -l`
- b) `ls -t`
- c) `ls -a`
- d) `ls -i`

70. What is a DHCP exclusion?

- a. A single IP address that is not to be supplied to clients by DHCP.
- b. A range of IP addresses that are not to be supplied to clients by DHCP.
- c. A number of static IP addresses that cannot be supplied to clients by DHCP.
- d. A single static IP address that cannot be supplied to clients by DHCP.

71. Find the odd one out: 3, 7, 15, 17, 22, 27, 29.

- a) 15
- b) 17
- c) 22
- d) 27

72. A and B together can finish a work in 30 days. They worked for it for 20 days and then B left the work. The remaining work was done by A alone in 20 days more. In how many days can A alone finish the work?

- a. 48 days
- b. 50 days
- c. 54 days
- d. 60 days

73. A mother is twice as old as her son. If 20 years ago, the age of the mother was 10 times the age of the son, what is the present age of the mother?

- a. 38 years
- b. 40 years
- c. 43 years
- d. 45 years

74. The sum of present ages of Ashok, Anil and Ajay is 75 years. If 5 years ago the ratio of their ages was 3 : 4 : 5, What is the present age of Anil?

- a. 26 Years
- b. 25 Years
- c. 32 Years
- d. 65 Years

75. Express 25 mps in kmph?

- a. 15 kmph  
c. 90 kmph
- b. 99 kmph  
d. None

76. A boy has nine trousers and 12 shirts. In how many different ways can he select a trouser and a shirt?

- a. 21  
c. 9
- b. 12  
d. 108

**Find the missing letter/number(s) from the four options (Q. no. 77 to 79)**

77. 2, 6, 12, 20, 30, 42, 56, \_\_\_

- a. 60  
c. 72
- b. 64  
d. 70

78. 1, 2, 5, 7, 11, \_\_\_\_\_, 17

- a. 12  
c. 14
- b. 13  
d. 15

79. AZ, BY, CX, DW, \_\_\_

- a. EX  
c. EY
- b. EU  
d. EV

80. In a certain coding system TRAIN is written as GIZRM, how will you code FIGURE?

- a) USTGKV  
c) URTFIV
- b) VTYXTC  
d) VKGTSV

81. Who composed our National Anthem?

- a. Rabindranath Tagore  
c. Bankimchandra Chatterjee
- b. Sri Aurobindo Ghosh  
d. None of these

82. Tiger was adopted as National Animal in

- a. Nov. 1970  
c. Dec. 1974
- b. Nov. 1972  
d. Apr. 1973

83. Who was the first woman Chief Justice of High Court in India?

- a. M. Fathima Beevi  
c. Anna Georga Malhotra
- b. Anna Chandi  
d. Leila Seth

84. Main component of bones and teethes are

- a. Calcium carbonate  
c. Calcium sulphate
- b. Calcium phosphate  
d. Calcium nitrate

85. Who is the present Chief Justice of Gauhati High Court

- a. Justice Ajai Lamba  
b. Justice Sudhanshu Dhulia

- c. Justice A. S. Bopanna                      d. Justice Ajit Singh

86. Mirabai Chanu has registered India's first medal at the Tokyo Olympics in which sporting event?

- a. Sprint                                              b. Wrestling  
c. Boxing                                              d. Weightlifting

87. Who is the first female swimmer to win seven medals in a single Olympic event?

- a. Janet Evans                                      b. Katie Ledecky  
c. Emma McKeon                                      d. Inge de Bruijn

88. As per the recent statement of the NITI Aayog, which country is the biggest gainer after the pandemic economic situation?

- a. India                                                      b. China  
c. United States                                      d. Russia

89. Covaxin, which was approved for Emergency Use in India, is developed by which pharma major?

- a. Bharat Biotech                                      b. Serum Institute of India  
c. Dr Reddys Labs                                      d. Biocon

90. Who is the new CEO of Amazon?

- a. Doug Gurr                                              b. Andy Jassy  
c. Werner Vogels                                      d. Brian Valentine

**Directions (Q. nos. 91-92) Choose the most suitable alternative in accordance with the correct use of tense**

91.    a. Seema did not open the door because she had washed her hair.  
      b. Seema did not open the door because she washed her hair.  
      c. Seema did not opened the door because she washed her hair.  
      d. Seema did not open the door because she was washing her hair.
92.    a. Mitra lived in London for two years when I went there.  
      b. Mitra was living in London for two years when I gone there.  
      c. Mitra had been living in London for two years when I went there.  
      d. Mitra has been living in London for two years when I went there.



**Directions (Q. nos. 93-95) Choose the correct option to fill the blanks**

93. The Earth ..... on its own axis

- a. rotated
- b. is rotating
- c. rotates
- d. rotating

94. I was exhausted at the end of the exam. I ..... for over two hours.

- a. had been writing
- b. had written
- c. was writing
- d. have written

95. Make haste lest you .....late.

- a. should get
- b. should not get
- c. may not got
- d. shall got

**Directions (Q. nos. 96-98) Choose the correct synonym of the given word**

96. Chivalrous

- a. Impoverished
- b. Impetuous
- c. Gallant
- d. Brave

97. Rectify

- a. To build
- b. Correct
- c. Destroy
- d. To command

98. Denounce

- a. Condemn
- b. Maintain
- c. Sustain
- d. Support

**Directions (Q. nos. 99-100) Choose the correct option**

99. A post without remuneration.

- a. Honorary
- b. Sinecure
- c. Voluntary
- d. Involuntary

100. A place that provides refuge

- a. Orphanage
- b. Shelter
- c. Asylum
- d. Sanatorium

## **Assamese Section**

101. তলৰ কোনটো শব্দৰ সমার্থক শব্দ ভুলকৈ দিয়া হৈছে

- |                       |                              |
|-----------------------|------------------------------|
| a. সোণ = স্বৰ্ণ, হেম  | b. স্বামী = পতি, দৰা         |
| c. অমৃত = সুধা, পীযুষ | d. চন্দ্র = বিভাবেৰী, যামিনী |

102. তলৰ শব্দবোৰৰ কোনটোৰ বানান ভুল?

- |              |            |
|--------------|------------|
| a. পৰ্ণকুটীৰ | b. ষড়ভুজা |
| c. অৰিয়াঅৰি | d. ষড়ানন  |

103. তলৰ কোনগৰাকী সাহিত্যিকে 'গোলাম' নামৰ গ্ৰন্থৰ বাবে সাহিত্য অকাডেমী বঁটা লাভ কৰিছিল

- |                        |                     |
|------------------------|---------------------|
| a. শীলভদ্ৰ             | b. সৌৰভ কুমাৰ চলিহা |
| c. সত্যেন্দ্ৰনাথ শৰ্মা | d. য়েছে দৰজে ঠংচি  |

104. বিশেষ্যৰ পৰা বিশেষণ কৰক

'সমাজ' ---

- |            |              |
|------------|--------------|
| a. সমাজৰ   | b. সমাজিক    |
| c. সামাজিক | d. এটাও নহয় |

105. তলত দিয়া সমোচ্চাৰিত শব্দবোৰৰ কোনটো শুদ্ধ

- |                    |                                      |
|--------------------|--------------------------------------|
| a. কঠা = মাটিৰ জোখ | b. কঁথা = ফটাকানি গোটাই সিয়া নিহালি |
| c. কথা = মাত-বোল   | d. আটাইকেইটা শুদ্ধ                   |

106. 'আলিবাটত চালি ধৰা' মানে কি?

- |                         |                              |
|-------------------------|------------------------------|
| a. মন মাৰি থকা          | b. কাম-বন নকৰি ধুন মাৰি ফুৰা |
| c. আনন্দত আত্মহাৰা হোৱা | d. সকলো কামতে আগৰণুৱা        |

এটা শব্দত প্ৰকাশ কৰক (প্ৰশ্ন নং 107 ৰ পৰা 109 লৈ)

107. মিহি নোহোৱা গুৰি বা বস্ত্ৰৰ লগত থকা আধাখুন্দা গুৰি

- |         |                    |
|---------|--------------------|
| a. মলখু | b. খুদ চাউল        |
| c. খৰচি | d. এটাও শুদ্ধ নহয় |

108. যি মৰোঁ মৰোঁ অৱস্থা হৈছে

- |           |            |
|-----------|------------|
| a. মুৰ্খু | b. মৃতক    |
| c. মৃতগু  | d. মৃতমত্ত |

109. বধ কৰিবৰ ইচ্ছা

- a. জিজ্ঞাসা  
b. হিংসা  
c. জিঘাংসা  
d. এটাও শুদ্ধ নহয়

110. তলৰ কোনটো শব্দই ঘোঁৰাৰ পিঠিত পৰা গাদীক বুজায়?

- a. জীন  
b. জীণ  
c. জিন  
d. এটাও শুদ্ধ নহয়

111. তলৰ কোনটো বাক্য শুদ্ধ

- a. ঘৰৰ চালখন উৱলি গ'ল।  
b. ঘৰৰ চালখন উৱলি গ'লা।  
c. দুয়োটাই শুদ্ধ  
d. এটাও শুদ্ধ নহয়

তলৰ ফকৰা যোজনাবোৰ সম্পূৰ্ণ কৰক (প্ৰশ্ন নং 112 ব পৰা 114 লৈ)

112. .... উটিলে গুড়ি পৰুৱাৰো মৰণ নাই

- a. পানীত  
b. সাহসে  
c. মাউখে  
d. এটাও শুদ্ধ নহয়

113. আৰ্জে মুকুতা, খাই ....

- a. শোকোতা  
b. দুবেলা  
c. পিটিকা  
d. মুকুতা

114. উণা ভাতে দুনা বল, অধিক ভাতে ....

- a. গাত বল  
b. বসাতল  
c. পেট  
d. এটাও শুদ্ধ নহয়

115. তলৰ কোনটো সন্ধিৰ ৰূপ অশুদ্ধ... ..

- a. দেৱৰ্ষি = দেৱ + ঋষি  
b. হিতৈষী = হিত + ঐষী  
c. অত্যাশ্ৰম = অতি + উশ্ৰম  
d. মহৌষধ = মহা + ঔষধ

116. তলৰ কোনটো সন্ধিৰ ৰূপ শুদ্ধ... ..

- a. মুনীন্দ্র = মুনি + ঈন্দ্র  
b. নৰেন্দ্র = নৰ + ইন্দ্র  
c. অভীষ্ট = অভী + ইষ্ট  
d. পৰীক্ষা = পৰি + ইক্ষা

117. শব্দসমূহৰ অৰ্থ থকা পুথিক কি বোলে?

- a. ব্যাকৰণ  
b. অভিধান  
c. সঞ্চয়ন  
d. এটাও নহয়

118. টং টংকৈ বজা ঘণ্টাৰ শব্দত মই সাৰ পাই গ'লো- বাক্যত ব্যৱহৃত 'টং টং' শব্দটোক কি শব্দ বুলি কোৱা হয়?

- a. অনুরূপ শব্দ  
b. অনুকাৰ শব্দ  
c. অনুকাৰ অনুরূপ শব্দ  
d. এটাও নহয়

তলৰ শব্দবোৰৰ শুদ্ধ প্ৰতিশব্দ বাছি উলিয়াওক (প্ৰশ্ন নং 119 ব পৰা 120 লৈ)

119. ক্ষিতীশ

- a. দিবাকৰ  
b. নৃপতি  
c. প্ৰভাকৰ  
d. আটাইকেইটা শুদ্ধ

120. বসুধা

- a. তটিনী  
b. শশী  
c. স্ৰোতৱতী  
d. এটাও শুদ্ধ নহয়

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