



# राष्ट्रीय प्रौद्योगिकी संस्थान दिल्ली

## NATIONAL INSTITUTE OF TECHNOLOGY DELHI

(शिक्षा मंत्रालय, भारत सरकार के अधीन एक स्वायत्त संस्थान)

(An autonomous Institute under the aegis of Ministry of Education (Shiksha Mantralaya), Govt. of India)

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### **PAPER-I EXAMINATION** **DATE: 15.06.2023 (THURSDAY)**

### **QUESTION PAPER FOR THE POST OF TECHNICIAN (CSE)** **(PAY LEVEL - 3)**

**Maximum Marks: 75**

**Time: 02 Hour**

**Name of Candidate: \_\_\_\_\_ Roll No: \_\_\_\_\_**

### **INSTRUCTIONS TO CANDIDATES**

1. This question paper has 75 questions (General Section: 25 and Post Related Section: 50). Each question carries one mark. There are four choices for answer (A, B, C, D) to each question. Choose the correct answer (one only) for each question and write the answer in the space provided against each question.
2. Candidate must write Name, Roll No. and sign on each page of this booklet.
3. The candidate should check that the booklet does not have any unprinted or torn or missing pages or questions etc. If so, get it replaced with another question paper, before question paper starts.
4. One (1) mark will be awarded for each correct answer. There will be no negative marking.
5. Return the Question Paper cum Answer Sheet to the invigilator after the examination is over.
6. **Mobile, Electronic Watch** and other **Electronic Gadgets** are prohibited in the examination.
7. There should not be any cutting or overwriting in the Answer.
8. Use of Unfair Means in Examination will lead to cancellation of candidature.

Signature of the candidate

Signature of the Invigilator

### **FOR OFFICE USE**

Paper	Max. Marks	Marks Obtained
General	25	
Post Related	50	

Signature of the Evaluator



11.	The total of ages of RITA, SITA and MEENA is 80 years, what was the total of their ages three years ago? (a) 71 years (b) 72 years (c) 74 years (d) 77 years	A					
12.	Arrange the words given below in a meaningful sequence. 1.FAMILY, 2. COMMUNITY 3. MEMBER 4. LOCALITY 5. COUNTRY (a) 3,1,2,4,5 (b) 3,1,2,5,4 (c) 3,1,4,2,5 (d) 3,1,4,5,2	A					
13.	Find the missing character: <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">B</td> <td style="text-align: center;">C</td> <td style="text-align: center;">E</td> <td style="text-align: center;">G</td> <td style="text-align: center;">?</td> </tr> </table> (a) Q (b) L (c) P (d) K	B	C	E	G	?	D
B	C	E	G	?			
14.	Change the voice of given sentence: <b>'Our task had been completed before Sunset'.</b> (a) We completed our task before sunset. (b) We have completed our task before sunset. (c) We complete our task before sunset. (d) We had completed our task before sunset.	D					
15.	In the given sentence identify the part which has the error: <b>'It was him / who came / running / into the class room'</b> (a) It was him (b) Who came (c) running (d) into the class room	A					
16.	Choose the one which can be substituted for the given sentence: <b>'A disease which spreads by contact.'</b> (a) Incurable (b) Infectious (c) contagious (d) fatal	C					
17.	Correct the given sentence by correcting the underline words: <b>'Why <u>did you not threw</u> the bag away?'</b> (a) did you not throw (b) had you not threw (c) did you not thrown (d) you did not thrown	A					
18.	Choose the option which best expresses the meaning of the given idioms/ phrase: <b>'To keep one's temper'</b> (a) to become hungry (b) to be in good mood (c) to preserve ones energy (d) None of these.	B					
19.	From the given words form the meaningful sentence? 1. do      2. today      3. you      4. must      5. It (a) 3,4,1,5,2 (b) 2,5,4,1,3 (c) 1,2,5,4,3 (d) 4,5,2,1,3	A					
20.	Which footballer has been named as the world's best player for 2022 by IFFHS? (a) Kylian Mbappe (b) Neymar (c) Lionel Messi (d) Cristiano Ronaldo	C					

21.	The concept of 'DIN -E- ELAHI' was founded by which king? (a) DARA SHIKOH (b) AKBAR (c) SHER SHAH SURI (d) SHAHJAHAN	B
22.	What is the validity of job card under MGNREGA? (a) 2 years (b) 3 years (c) 5 years (d) 10 years	C
23.	Which industry is referred to as the backbone of the modern industry? (a) Iron and steel (b) Jute (c) Tea (d) cotton textile	A
24.	What does VVPAT stand for, in voting? (a) voter verified paper audit trail (b) voter verifiable paper audit trail. (c) voter verified paper auditing trail (d) none of the above.	B
25.	Who among the following appoint the 'LOKAYUKTA' and 'UPLOKAYUKTA'? (a) President (b) Prime minister (c) Vice President (d) Governor or lieutenant governor of concerned state/ UT.	D



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## POST RELATED SECTION

**FOR THE QUESTION PAPER FOR THE POST OF TECHNICIAN (CSE)**

**(PAY LEVEL 03)**

**DATE: 15.06.2023 (THURSDAY)**

Q.No.	Question	Answer
1	<b>What is the correct order of steps for assembling a PC?</b> A. Install CPU > Install RAM > Connect storage devices > Install motherboard > Connect power supply cables B. Install RAM > Install CPU > Connect storage devices > Install motherboard > Connect power supply cables C. Install motherboard > Install CPU > Install RAM > Connect storage devices > Connect power supply cables D. Connect storage devices > Install CPU > Install RAM > Install motherboard > Connect power supply cables	C
2	<b>Which of the following could be a possible solution if a laptop's display shows distorted or flickering images?</b> A. Updating graphics drivers B. Adjusting screen resolution C. Checking the display cable connections D. All of the above	D
3	<b>Which of the following is a primary storage device?</b> A. Hard disk drive (HDD) B. Random access memory (RAM) C. Optical disc drive (ODD) D. Graphics processing unit (GPU)	B
4	<b>Which component is responsible for executing instructions and performing calculations in a computer system?</b> A. Central Processing Unit (CPU) B. Random Access Memory (RAM) C. Graphics Processing Unit (GPU) D. Power Supply Unit (PSU)	A
5	<b>What is the main circuit board that connects and allows communication between all the hardware components in a computer system?</b> A. Central Processing Unit (CPU) B. Random Access Memory (RAM) C. Motherboard D. Power Supply Unit (PSU)	C

6	<p><b>If a laptop's Wi-Fi connection is not working, which of the following steps can be taken to troubleshoot the issue?</b></p> <p>A. Checking if Wi-Fi is enabled on the laptop          B. Restarting the router and laptop          C. Updating Wi-Fi drivers          D. All of the above</p>	D
7	<p><b>A multi programming system is one that can</b></p> <p>A. Run very fast          B. Share hardware resources with many programs simultaneously          C. Compute many programs simultaneously          D. Use many operating systems</p>	B
8	<p><b>Which operating systems commonly support webcam installation?</b></p> <p>A. Windows          B. macOS          C. Linux          D. All of the above</p>	D
9	<p><b>Which key is commonly used to access the BIOS setup utility during computer startup?</b></p> <p>A. F2          B. F10          C. Delete          D. Escape</p>	A
10	<p><b>The storage locations in the internal storage of a CPU are called</b></p> <p>A. Contents          B. Addresses          C. Locations          D. Mask</p>	B
11	<p><b>Find the output of the following code:</b></p> <pre>#include&lt;stdio.h&gt; int main() {     int num, a=15;     num = --a--;     printf("%d %d", num, a);     return 0; }</pre> <p>A. 15 15          B. 15 14          C. 14 15          D. 14 14</p>	B
12	<p><b>Find the output of the following code:</b></p> <pre>#include&lt;stdio.h&gt; int main() {     register int a,b,x;     printf("%d",&amp;a);     x=a+~b;     printf("%d",x);     return 0; }</pre> <p>A. Output will depend upon user input          B. Output will addition of a and b          C. Output will difference of a and b          D. Compilation error</p>	D



20	<b>Which sorting algorithm works by repeatedly finding the minimum element from the unsorted portion and placing it at the beginning?</b> A. Selection Sort B. Heap Sort C. Radix Sort D. Shell Sort	A
21	<b>Which programming language is commonly used for client-side scripting in web design?</b> A. HTML B. CSS C. JavaScript D. PHP	C
22	<b>Which of the following is a commonly used technique to make a website responsive and adaptable to different screen sizes?</b> A. Media queries B. JavaScript libraries C. Database integration D. CSS transitions	A
23	<b>Which clause is used to filter data based on specified conditions in a SQL query?</b> A. WHERE B. FROM C. GROUP BY D. ORDER BY	A
24	<b>Which CSS selector targets an element with a specific ID?</b> A. .class B. #id C. element D. [attribute]	B
25	<b>Which HTML tag is used to create a hyperlink?</b> A. <url> B. <link> C. <href> D. <a>	D
26	<b>Which HTML element is used to define the main heading of a web page?</b> A. <header> B. <h1> C. <title> D. <body>	B
27	<b>HTML comments should be enclosed between</b> A. <!-- and --> B. <! And !> C. <!-- and --“” D. none of the above	A
28	<b>Which of the following is true</b> A. In tables, header cells are centred by default and the data cells are right-aligned. B. In the case of character formatting the tag <TW> is used for typewriter-like text C. Unordered list starts with <UL> and ends with <UL> D. <SUPR> tag is used for superscripts text	C
29	<b>Which CSS property is used to control the space between the content and the border of an element?</b> A. margin B. padding C. spacing D. gap	B
30	<b>Which SQL join type returns only the matching records from both tables?</b> A. INNER JOIN B. LEFT JOIN C. RIGHT JOIN D. FULL JOIN	A

31	<b>What is the primary reason for upgrading an operating system?</b> A. Improved user interface B. Enhanced security features C. Increased system speed D. Access to new applications	B
32	<b>What is the default web browser on Apple's macOS and iOS operating systems?</b> A. Google Chrome B. Microsoft Edge C. Safari D. Mozilla Firefox	C
33	<b>Which web browser is known for its fast performance and extensive support for web standards?</b> A. Google Chrome B. Microsoft Edge C. Safari D. Mozilla Firefox	A
34	<b>Which of the following is a common method to restore an operating system to a previous state?</b> A. Rebooting the computer B. Deleting system files C. Performing a system backup D. Resetting the BIOS settings	C
35	<b>What is a system restore point in the context of restoring an operating system?</b> A. A physical location where system files are stored B. A specific date and time representing a stable system state C. A software utility used to restore deleted files D. A system administrator responsible for restoring the OS	B
36	<b>What is a recommended best practice before upgrading an operating system?</b> A. Creating a backup of important data B. Disabling all security software C. Deleting unnecessary files and applications D. Disconnecting from the internet	A
37	<b>Which boot loader is commonly used in most Linux distributions?</b> A. Windows Boot Manager B. NT Loader C. Linux Loader D. Grand Unified Bootloader	D
38	<b>What is the purpose of a package manager in Linux?</b> A. It configures hardware devices during installation. B. It provides a graphical user interface (GUI) for the operating system. C. It manages software updates and security patches. D. It manages network connections and settings.	C
39	<b>What is the primary role of the installation wizard during the OS installation process?</b> A. It configures the network settings for internet connectivity. B. It provides step-by-step guidance and prompts for user inputs. C. It installs additional software and applications. D. It optimizes the system's performance based on hardware configuration.	B
40	<b>Which operating system is commonly used for servers and is known for its stability and security?</b> A. Windows Server B. macOS C. Ubuntu Server D. Android	C

41	<b>Identify the layer which provides service to the user.</b> A. Physical layer B. Transport layer C. Network layer D. Application layer	D
42	<b>What does TCP/IP stand for?</b> A. Telephone control protocol/Internet protocol B. Transmission control protocol/Internet protocol C. Transmission control protocol/International protocol D. None	B
43	<b>Identify among the following the network device used to connect two dis-similar types of networks.</b> A. Switch B. Hub C. Bridge D. Gateway	D
44	<b>Which of the following is a common troubleshooting step for file sharing issues in a network?</b> A. Restart the computer B. Upgrade the router firmware C. Install antivirus software D. Disable the firewall	A
45	<b>Which type of topology is best suited for large businesses which must carefully control and coordinate the operation of distributed branch outlets?</b> A. Star B. Local area C. Hierarchical D. Ring	A
46	<b>What kind of transmission medium is most appropriate to carry data in a computer network that is exposed to electrical interferences?</b> A. Unshielded twisted pair B. Optical fiber C. Coaxial cable D. Microwave	B
47	<b>What is the access point (AP) in a wireless LAN?</b> A. Device that allows wireless devices to connect to a wired network B. Wireless devices itself C. Both device that allows wireless devices to connect to a wired network and wireless devices itself D. All the nodes in the network	A
48	<b>Which of the following frequency bands is commonly used for Wi-Fi communication?</b> A. 2.4 GHz B. 900 MHz C. 5 GHz D. 1.8 GH	A
49	<b>One of the header fields in an IP datagram is the Time to Live (TTL) field. Which of these below given statements best explains the need for this field?</b> A. It can be used to reduce delays B. It can be used to optimize throughput C. It can be used to prioritize packets D. It can be used to prevent packet looping	D
50	<b>What command is used to create a backup configuration?</b> A. copy running backup B. config mem C. copy running-config startup-config D. wr mem	C