



NATIONAL INSTITUTE OF TECHNICAL TEACHERS TRAINING AND RESEARCH

Institution Deemed to be University under Distinct Category, A Centrally Funded Technical Institute

Ministry of Education, Government of India, Taramani, Chennai - 600 113.

राष्ट्रीय तकनीकी शिक्षक प्रशिक्षण एवं अनुसंधान संस्थान

विशिष्ट श्रेणी के तहत मानित विश्वविद्यालय संस्थान, एक केंद्रीय वित्त पोषित तकनीकी संस्थान

शिक्षा मंत्रालय, भारत सरकार, तारामणि, चेन्नई - ६०० ११३.

Date of Examination:	14.09.2025	Time: 90 Minutes
Name of the Post:	Technical Assistant Grade I (Cameramen)	
Name of the Candidate:		
Roll No:		

Candidate's Signature

Invigilator's Signature

Instructions to the Candidate:

1. Use of Calculators, Cell Phones and Other Electronic Devices are not permitted inside the examination hall.
2. Candidate should fill the details on both question paper booklet and OMR sheet carefully without any corrections.
3. Candidate should carefully read the instructions given on the question paper booklet and OMR sheet.
4. Candidate should mark correct answer only on OMR sheet.
5. Question paper consists of **100 questions**. Questions in the form of **MCQ** type.
6. Each question carrying **one** mark. **No negative mark for wrong answer.**
7. Clarifications on Questions are not permitted.
8. Rough works can be done in the rough sheet provided.
9. No Candidate is allowed to leave the examination hall till the examination is completed.
10. Candidate should return question paper booklet, OMR sheet and the rough sheets after completion of examination to the invigilator.

Question Paper
Technical Assistant Gr. I (Cameraman)

Answer ALL the questions:

1. Which memory is directly accessible by the CPU without any intermediary?
 - a. Cache Memory
 - b. Virtual Memory
 - c. Secondary Storage
 - d. Flash Memory

2. Which of the following storage devices works on the principle of magnetism?
 - a. Solid State Drive
 - b. Hard Disk Drive
 - c. Flash Drive
 - d. Blu-ray Disc

3. In laptop specifications, DDR4 3200 MHz RAM means:
 - a. The RAM has a 3200 MB storage capacity
 - b. RAM type DDR4, with an effective transfer rate of 3200 MT/s
 - c. 3200 bits can be stored at once
 - d. It works only on 3.2 GHz processors

4. Which of the following is true about “64 GB eMMC storage” in system specs?
 - a. Faster and more reliable than SSD NVMe
 - b. Volatile storage is cleared when the power is off
 - c. Optical storage for mobile devices
 - d. Slower flash storage, soldered to the motherboard

5. Which input device works on the principle of total internal reflection?
 - a. Trackball
 - b. Optical Mouse
 - c. Touch Screen
 - d. Light Pen

6. OCR stands for:
 - a. Optical Code Reader
 - b. Output Control Register
 - c. Operator Control Recognition
 - d. Optical Character Recognition

7. In Windows, which panel is typically used to install a new scanner?
 - a. Device Manager
 - b. Control Panel
 - c. Task Manager
 - d. BIOS Settings
8. When sharing a printer on a network, the computer it is physically attached to is known as:
 - a. Print Spooler
 - b. Network Hub
 - c. Print Server
 - d. Gateway
9. Which protocol is primarily used for browsing websites?
 - a. SMTP
 - b. FTP
 - c. HTTP
 - d. SNMP
10. Which Internet service allows remote login from one computer to another?
 - a. FTP
 - b. TELNET
 - c. IMAP
 - d. POP3
11. Cloud computing applications mainly provide:
 - a. Free access to physical hardware
 - b. Online storage, processing and services
 - c. Faster speed of computer systems
 - d. Built-in security and antivirus tools
12. Paying electricity bills through an online government website is an example of:
 - a. E-banking application
 - b. E-learning application
 - c. Cloud storage application
 - d. E-governance application
13. Which Internet application supports real-time text communication?
 - a. Internet Relay Chat service
 - b. File Transfer Protocol System
 - c. Electronic mail service
 - d. Hypertext Transfer Protocol

14. The default file system used in modern versions of Windows is:
- FAT16
 - FAT32
 - NTFS
 - EXT4
15. The Windows Registry is used to store:
- Files and Folders
 - System configuration and settings
 - User documents
 - Hardware devices only
16. By default, the extension of a Microsoft Word 2016/2019/2021 file is:
- .dem
 - .uot
 - .docx
 - .rtf
17. Which feature in Word helps to check spelling and grammar?
- AutoCorrect
 - Thesaurus
 - SmartArt
 - Spell Check
18. In MS Excel, rows are labeled using _____ and columns are labeled using _____.
- Numbers, Letters
 - Letters, Numbers
 - Symbols, Colours
 - Roman Numerals, Special Characters
19. Which symbol is always used to begin a formula in MS Excel?
- +
 - #
 - =
 - \$
20. The “Rehearse Timings” feature is used to:
- Edit slides automatically
 - Practice and record time for each slide
 - Add animations
 - Save a presentation with time

21. Which Access object is used to retrieve and display data based on conditions?

- a. Table
- b. Report
- c. Query
- d. Form

22. In MS Access, SQL stands for:

- a. Structured Query Language
- b. Simple Query Language
- c. Sequential Query Logic
- d. Standard Question Language

23. IPv4 addresses are made up of:

- a. 16 bits
- b. 32 bits
- c. 64 bits
- d. 128 bits

24. Which shortcut is used to close the current application?

- a. Alt + Esc
- b. Alt + F4
- c. Ctrl + F4
- d. Ctrl + Q

25. Which of the following is a distributed operating system?

- a. Amoeba
- b. MS-DOS
- c. Windows 98
- d. Android

26. ISO in a camera mainly controls:

- a. Image brightness and sensitivity
- b. Lens focusing speed
- c. Battery usage
- d. Memory card speed

27. Which function reduces blur caused by hand movement?

- a. Autofocus
- b. Image stabilization
- c. ISO adjustment
- d. White balance

28. The camera technique that makes distant objects appear closer is called:
- Wide-angle shot
 - Close-up shot
 - Low-angle shot
 - Telephoto shot
29. Which frame rate is often used in security cameras to save storage space?
- 5–15 fps
 - 24 fps
 - 60 fps
 - 120 fps
30. The component that converts light into electrical signals in a video camera is:
- Zoom Lens
 - CCD/CMOS Sensor
 - Liquid Crystal Display
 - Rolling Shutter Mechanism
31. Which lens type helps in architectural photography to correct perspective distortions?
- Tilt-Shift Lens
 - Zoom Lens
 - Prime Lens
 - Macro Lens
32. Nikon's long-standing lens mount system is called:
- EF Mount
 - E-Mount
 - X Mount
 - F Mount
33. Ultra-wide-angle lenses usually have focal lengths less than:
- 100mm
 - 85mm
 - 24mm
 - 50mm
34. Variable ND filters are useful because they:
- Can change focal length
 - Allow adjustable light reduction
 - Increase ISO range
 - Improve optical zoom
35. The rule of thirds in photography is mainly used for:
- Compositional framing
 - Exposure balance
 - Color correction
 - Shutter speed control

36. A tilted or slanted camera angle that creates a sense of unease is called:
- High-angle shot
 - Dutch angle
 - Overhead shot
 - Medium shot
37. Mirrorless cameras differ from DSLRs mainly because they:
- Do not use a reflex mirror mechanism
 - Cannot shoot video
 - Do not support interchangeable lenses
 - Always use a fixed aperture
38. What is a key advantage of back-illuminated (BSI) sensors?
- Lower megapixel count
 - Reduced file sizes
 - Improved light sensitivity in low light
 - Faster digital zoom
39. The cinematic widescreen aspect ratio often used in movies is:
- 1.33:1
 - 2.39:1
 - 4:3
 - 1:1
40. 4K UHD resolution is commonly represented as:
- 2560×1440 pixels
 - 1920×1080 pixels
 - 3840×2160 pixels
 - 7680×4320 pixels
41. In the CMYK colour system, the letter 'K' stands for:
- Key (Black)
 - Kelvin (Temperature)
 - Kernel (Processing)
 - Kodak (Film Standard)
42. The device used to preview live video feeds in a studio is called:
- Teleprompter
 - Monitor
 - Camera dolly
 - Tripod
43. A single-camera setup is most commonly used in:
- Live sports events
 - Sitcoms recorded with an audience
 - Feature films and dramas
 - News studio broadcasts

44. A sitcom with a live studio audience is usually shot with:
- Single-camera setup
 - Handheld camera setup
 - Drone camera setup
 - Multi-camera setup
45. An action camera such as GoPro, is best suited for:
- Studio photography
 - Underwater and adventure sports
 - Portrait photography
 - Newsroom interviews
46. Which technique uses smooth camera movement on tracks or wheels to follow action?
- Zoom and Panning shot
 - Dolly/Tracking shot
 - Tilt shot
 - Simple Panning shot
47. Which type of shot is best for showing a character's emotions in detail?
- Extreme close-up
 - Long shot
 - Medium shot
 - Tracking shot
48. Which framing technique leaves space in the direction a subject is looking or moving?
- Rule of thirds
 - Lead room
 - Center framing
 - Extreme close-up
49. Which latest support system provides the most flexibility for aerial or bird's-eye shots?
- Tripod
 - Crane
 - Drone
 - Slider
50. Which tool allows smooth horizontal or vertical camera movement for short-range shots?
- Slider
 - Tripod
 - Crane
 - Matte box
51. Which lighting technique is most effective for minimizing wrinkles and skin texture in close-up portrait photography?
- Butterfly lighting
 - Rembrandt lighting
 - Split lighting
 - Low-key side lighting

52. In studio lighting, which modifier creates the hardest shadows with the sharpest edges?
- Softbox
 - Umbrella reflector
 - Bare bulb spotlight
 - Diffusion panel
53. The “Silhouette Lighting” technique is achieved when:
- The subject is lit from the front with soft fill
 - The subject is backlit strongly, while the front remains unlit
 - Both key and fill lights are of equal intensity
 - The subject is illuminated only by practicals
54. Which special lighting technique creates the “halo effect” around hair in portraits?
- Rim lighting
 - Split lighting
 - Butterfly lighting
 - Bounce fill lighting
55. Which of the following lighting equipment utilizes gas discharge technology and is recognized for its high output with low power consumption?
- Tungsten halogen lamp
 - HMI light
 - Fluorescent tube light
 - LED fresnel
56. In the context of visual media, “lighting” primarily refers to:
- Using only natural daylight for filming
 - Setting up the camera and its equipment
 - Placing actors carefully in front of the camera
 - Controlling and adjusting the light to show a scene
57. The principle of contrast in lighting refers to:
- The type of lens used for shooting
 - The difference between light and shadow areas
 - The arrangement of props on the set
 - The background used in the location
58. In lighting for media, reflection is often used to:
- Block and cut all sources of light
 - Remove and erase shadows from the scene
 - Soften and redirect light onto the subject
 - Create heat and color in the background
59. The quality of light refers to:
- The hardness or softness of the light
 - The size of the set or stage used
 - The distance of the camera from the subject
 - The number of lights placed on stage

60. The color of light refers to:
- The costumes worn by the performer
 - The shadows were cast behind the object
 - The warmth or coolness of the light
 - The editing style in post-production
61. A photographer is shooting a model outdoors at noon. The sunlight is too harsh, creating harsh shadows. What should be done to turn the direct light into indirect light?
- Move the model into stronger sunlight
 - Use a bare spotlight to add more light
 - Place a diffuser or bounce sunlight off a reflector
 - Increase the shutter speed of the camera
62. In a portrait studio, the photographer wants soft, flattering light for an elderly subject. Which setup is best?
- Softbox or umbrella to create indirect light
 - A bare bulb placed close to the subject
 - Spotlight without modifiers on the subject
 - Direct flash from the camera
63. Side lighting on a subject is mostly used to:
- Create flat and even lighting everywhere
 - Add depth, texture, and strong shadows
 - Remove all highlights from the surface
 - Soften the image without any detail
64. Which is the best example of treating light as a subject?
- A close-up of a flower in sunlight
 - A portrait taken in a soft studio light
 - A product photo with a reflector was used
 - A picture of sun rays streaming through trees
65. A street photographer notices strong midday sun casting bold geometric shadows from a building. By excluding the building and capturing only the shadows on the pavement, the photographer is practicing:
- Abstract photography
 - Flat lighting
 - Fill-flash technique
 - Elimination of negative space
66. Which artificial light source is known for producing a warm color temperature?
- LED panel
 - HMI light
 - Tungsten lamp
 - Fluorescent tube

67. Which color temperature range is common during Golden Hour?
- 9000K – 10000K
 - 5000K – 6500K
 - 3000K – 5000K
 - 2000K – 2500K
68. Which artificial light source is most portable for outdoor night shoots?
- HMI lights
 - LED panels
 - Tungsten fresnels
 - Neon lights
69. What is the purpose of using gels in lighting?
- To block light
 - To balance light
 - To diffuse light
 - To absorb light
70. In photography and cinematography, which part of the spectrum can cause skin damage but is invisible to the eye?
- Infrared
 - Ultraviolet
 - Gamma rays
 - Visible blue light
71. In the visible spectrum, the order of colors from shortest to longest wavelength is:
- Violet → Indigo → Blue → Green → Yellow → Orange → Red
 - Red → Orange → Yellow → Green → Blue → Indigo → Violet
 - Yellow → Red → Green → Blue → Violet → Indigo → Orange
 - Green → Yellow → Orange → Red → Violet → Blue → Indigo
72. What is the main drawback of direct lighting in photography?
- Too soft for portraits and landscapes
 - Creates flat images and videos
 - Produces harsh shadows and highlights
 - Cannot be used indoors
73. According to the inverse square law, if the distance between the light and the subject is reduced from 6 meters to 3 meters, the illumination on the subject will:
- Stay constant
 - Increase four times
 - Decrease four times
 - Double

74. What do you get when you mix the three primary colours of light in equal intensity?
- Black
 - Grey
 - Brown
 - White
75. Colour temperature adjustment in cameras is usually handled by:
- ISO setting
 - Shutter speed
 - White balance
 - Aperture
76. Which microphone is most suitable for outdoor interviews in a noisy environment?
- Omnidirectional
 - Cardioid
 - Shotgun
 - Ribbon
77. The clapboard (slate) used during video shoots mainly helps in:
- Lighting adjustment
 - Audio-video synchronization
 - Framing shots
 - Focusing the camera
78. In professional audio recording, the standard sampling rate for high-quality production is:
- 22.05 kHz
 - 44.1 kHz
 - 48 kHz
 - 96 Hz
79. The primary function of a telecine machine in capture is to:
- Project films in theatres
 - Transfer film images into video format
 - Store audio tracks
 - Enhance picture resolution
80. Which capture device is most suitable for live streaming with a direct computer connection?
- Capture card
 - Film camera
 - Analog tape recorder
 - Projector
81. Which factor is most critical to control during outdoor recording?
- Echo
 - Ambient noise
 - Audio compression
 - White balance

82. Which wind protection accessory is commonly used for outdoor microphone recording?
- Pop filter
 - Shock mount
 - Acoustic panel
 - Dead cat
83. XLR connectors are preferred in professional audio recording because they:
- They are smaller and lighter
 - Support wireless transmission
 - Reduce signal interference and noise
 - They are cheaper than other cables
84. A condenser microphone requires _____ to operate.
- Dynamic diaphragm
 - Ribbon motor
 - Transformer
 - 48V phantom power
85. Which microphone is commonly clipped to clothing for interviews and television?
- Lavalier microphone
 - Piezoelectric microphone
 - Contact microphone
 - Parabolic microphone
86. A parabolic microphone is primarily used for:
- Capturing group discussions indoors
 - Wildlife or sports commentary
 - Close-up interviews
 - Studio voiceovers
87. Which microphone is widely used by singers during live stage performances?
- Ribbon microphone
 - Dynamic handheld microphone
 - Lavalier microphone
 - Shotgun microphone
88. What is the purpose of equalization in an audio mixer?
- To increase sound loudness
 - To remove echo
 - To store audio presets
 - To adjust frequency balance
89. A subgroup in an audio mixer allows you to:
- Assign multiple channels to one fader
 - Power condenser microphones
 - Adjust EQ only
 - Send signals directly to headphones

90. Which mixer function helps reduce sudden loud peaks in sound?
- Equalization
 - Phantom power
 - Compression
 - Gain routing
91. Which professional recording medium offers non-linear editing capabilities?
- Vinyl Record
 - Hard Disk Drive
 - Cassette Tape
 - Magnetic Reel
92. Which format is most common for archiving high-quality audio in broadcast houses today?
- MP3
 - WAV
 - WMA
 - OGG
93. FLAC is an abbreviation for:
- Free Lossless Audio Codec
 - Full Layer Audio Compression
 - Fast Layer Audio Container
 - Free Layer Audio Codec
94. MP3 compression works by:
- Increasing bit depth
 - Encoding video frames
 - Using lossless algorithms
 - Removing inaudible sound frequencies
95. The H.264 standard is associated with:
- Audio compression
 - Video compression
 - Image compression
 - Text compression
96. Which video format is widely used for online streaming platforms like YouTube?
- MP4
 - WMV
 - FLV
 - MKV
97. Which of the following is essential for accurate dubbing?
- Increasing background noise
 - Recording without headphones
 - Matching lip-sync with actors
 - Ignoring the original timing

98. Which environment is ideal for dubbing recording?
- a. Outdoor field
 - b. Soundproof studio
 - c. Open auditorium
 - d. Control room with echo
99. Foley sounds are often added during dubbing to:
- a. Replace dialogue
 - b. Enhance natural sound effects
 - c. Adjust video color
 - d. Synchronize subtitles
100. The term “looping” in dubbing refers to:
- a. Repeating video frames for synchronization
 - b. Looping background music during production
 - c. Creating visual effects in repeated sequences
 - d. Recording dialogue in repeated short segments

Question Number	Answer
Question 1	A
Question 2	B
Question 3	B
Question 4	D
Question 5	C
Question 6	D
Question 7	B
Question 8	C
Question 9	C
Question 10	B
Question 11	B
Question 12	D
Question 13	A
Question 14	C
Question 15	B
Question 16	C
Question 17	D
Question 18	A
Question 19	C
Question 20	B
Question 21	C
Question 22	A
Question 23	B
Question 24	B
Question 25	A
Question 26	A
Question 27	B
Question 28	D
Question 29	A
Question 30	B
Question 31	A
Question 32	D
Question 33	C
Question 34	B
Question 35	A
Question 36	B
Question 37	A
Question 38	C
Question 39	B
Question 40	C
Question 41	A
Question 42	B
Question 43	C
Question 44	D
Question 45	B
Question 46	B
Question 47	A
Question 48	B
Question 49	C
Question 50	A
Question 51	A
Question 52	C
Question 53	B

Question 54	A
Question 55	B
Question 56	D
Question 57	B
Question 58	C
Question 59	A
Question 60	C
Question 61	C
Question 62	A
Question 63	B
Question 64	D
Question 65	A
Question 66	C
Question 67	C
Question 68	B
Question 69	B
Question 70	B
Question 71	A
Question 72	C
Question 73	B
Question 74	D
Question 75	C
Question 76	C
Question 77	B
Question 78	C
Question 79	B
Question 80	A
Question 81	B
Question 82	D
Question 83	C
Question 84	D
Question 85	A
Question 86	B
Question 87	B
Question 88	D
Question 89	A
Question 90	C
Question 91	B
Question 92	B
Question 93	A
Question 94	D
Question 95	B
Question 96	A
Question 97	C
Question 98	B
Question 99	B
Question 100	D