

**NATIONAL INSTITUTE OF TECHNICAL TEACHERS TRAINING AND RESEARCH**  
**Taramani, Chennai – 600 113.**

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**Name of the Post : Technical Assistant Gr. I (Cameraman)**

**SYLLABUS FOR THE WRITTEN TEST (Objective Type)**

There will be 4 sections in the written test with 100 questions that account for a total of 100 marks. The subject-wise details are given below:

Section	Subject	No. of Questions	Max Marks	Exam Duration
1.	Computer Awareness	25	25	90 minutes
2.	Camera Techniques	25	25	
3.	Lighting Techniques	25	25	
4.	Recording Techniques	25	25	
<b>TOTAL</b>		<b>100</b>	<b>100</b>	

**Computer awareness**

Components of a computer system, specifications of a computer system, Input and output devices and installation of printers and other input output devices., Introduction to Internet and Internet Applications, MS windows, MS-Word, MS-Excel, MS Power Point, MS Access, Computer Networking, Computer shortcut keys, Operating System types.

**Camera Techniques:**

Basic function of Camera, Perception of Vision, Frame rates, Parts and functions of a Video Camera, Camera lens, Lens mounts, Focal length, Camera Filters, Rules and Principles, Camera angles and movements, Specifications and selection of camera, Sensors, Aspect Ratio, Resolutions, Color Systems, Basics of Studio equipment, Single Camera and Multi Camera set up, types of camera and its usage, different camera techniques used in production, Basic Shots & Composition, Framing, Camera support systems, Tools and equipment.

**Lighting Techniques:**

Basic Lighting Techniques, Special Lighting Techniques, Different Lighting Equipment, Definition of Lighting, Principles of Lighting, Reflection, Light Characteristics, Color, Direct Light and Indirect Light, Light and Subject, Light as subject, Shadow as subject, Light sources, Natural Light and Artificial Light, Methods of Modifying Light, Electromagnetic spectrum, visible spectrum, Behaviour of light (Direct and Indirect), Inverse square law, Basic principles of colour, Colour temperature.

## **Recording Techniques:**

Audio and video recording techniques, Capture Devices. Outdoor Studio Recording (Specifications and selection of recording equipment) Types of Microphones based on their construction and based on the pick-up pattern, Uses of microphone, Use of Audio Mixer, types of Recording media (media used for professional, broadcast recordings). Audio and Video file formats and compression, dubbing.

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