

**Syllabus**

**For the trade of**

# **Digital Photographer**

**Under CTS**

**2002**

**Designed by**

**Government of India**

**Ministry of Labour (D.G.E.&T.)**

**CENTRAL STAFF TRAINING AND RESEARCH INSTITUTE**

**EN – Block, Sector – V, Salt Lake,**

**Kolkata-700091.**

**List of members attended the Trade Committee Meeting to finalise the syllabus for the trade of “DIGITAL PHOTOGRAPHER” under C.T.S.**

<u>S/Shri</u>			
1.	H. Somasundaram, Director	CSTARI, Kolkata	Chairman
2.	Ranjan Kr. Bose Lecturer & Incharge Dept. of Photography	Regional Instt. Of Printing Technology Govt. of W.B. Jadavpur, Kolkata	Member
3.	Kajol Deb Cameraman	Doordarshan Kendra, Kolkata	Member
4.	Dhruba Jyoti Ghosh Cameraman	- Do -	Member
5.	Sumit Banerjee Deputy Director	Roop Kala Kendra Salt Lake, Kolkata	Member
6.	Debidas Banerjee Founder & Faculty Member	Chhayapath, Kolkata	Member
7.	Pradip Sadhukhan Faculty & Camera man	Instt. Of Learning Technician of Photography, Kolkata	Member
8.	Goutam Sarkar Faculty & Cameraman	- Do -	Member
9.	R.K.Poddar Cameraman	Central Institute of Photography	Member
10.	Sanjay Kant, DDT	CSTARI, Kolkata	Member
11.	P.K.Kolay T.O.	CSTARI, Kolkata	Member
12.	G. Nandi Jr. D/Man	CSTARI, Kolkata	Member

## GENERAL INFORMATION

1. Name of the Trade : Digital Photographer
2. NCO code No. :
3. Duration of Craftsmen Training : One Year (52 Weeks)
4. Entry Qualification : Passed 12th Class under 10+2 system of education or its equivalent
5. Unit Size : 16 Trainees
6. Space required : 3.5 sq.mt. per trainee (Excluding Space for studio)

## Syllabus for the Trade of "Digital Photographer" under CTS

Week No.	Trade Practical	Trade Theory
1	Introduction to Training Familiarisation with the Institute. Importance of trade training. Instruments used in the trade. Handling of TLR, SLR & Digital cameras, manual & autofocus.	Importance of safety and general precautions observed in the trade by the Institution. Care & maintenance of equipments & material. Defination of photography, Introduction to twin lens reflex camera, single lens reflex camera & Digital Camera.
2	Use of natural light, tungsten light, flourescent light, single & multiple electronic flash, reflectors, exposure meters, studio flash & accessories and guide number.	Light sources for photography. Colour temperature & colour balance.
3	Use of Panchromatic, Orthochromatic and colour films of various speeds.	Knowledge about different types of films & film speed.
4-8	Practice on different types of composition. Taking photographs using different types of lenses using different aperture, shutter speed setting. Taking photographs of portrait, studio photography, commercial / Advertisement photography, sports photography, fashion photography, slow and fast moving objects, functions, machines & processes, landscape, architecture, night photography, children, animal, birds, Shooting spot etc. by Digital Camera	Knowledge of visual composition and aesthetic approaches. Knowledge of still digital camera and its accessories. Knowledge of different types of lenses & their uses. Idea on lens coating, covering power, aberrations of lens, perspective. Conception of aperture, shutter speed, types of shutter, depth of field, use of lens hood, tripod, self timer. Filters- its type & effects. Concept about traditional & digital dark room.
9-12	Use of computer operating system, concept of internet, sending photographs through E-Mail.	Knowledge of computer operating system, Internet, E-Mail etc. Knowledge of adequate software on printing generation of print for different digital printer after editing.
13-15	Ability of taking printouts of photographs taken by a digital camera from computer printer. Concept of image transportation – floppy, CD & Zip.	Knowledge of computer application regarding process of taking printouts of photographs taken through a digital camera. Knowledge of different types of photo paper required for printing. Knowledge of different types of printer in respect of their resolution
16-23	Ability to scan photographs and capture frames through scanner & capture card, editing	Knowledge of other different types of capturing methods through

	retouching of photographs using photo editing software.	scanners, frame grabber with Digital camera. Knowledge of photo editing through different types of updated photo editing softwares.
24-28	<b>Project Wok ( Port Folio )</b>	
29-35	Handling of digital video camera and other professional updated video cameras and their accessories. Camera movements – Pan –Tilt-Zoom. Dimension of images.	Introduction to Video, use of video as a communication medium, video technology, types of video cameras- their various formats, types of various video tapes. Principle of video recording.
36-38	<u>Lighting of different areas of video shooting.</u> Practice on three point lighting, indoor and outdoor lighting etc. Practice on hard & soft lighting. Single camera lighting, bounce lighting, silhouette lighting. Use of reflectors & sceamers through use of camera.	Knowledge of different types of video lighting. Concept of power distribution depending upon the requirement of the light output.
39	Concept of audio video recording, mixing, editing, dubbing of sound, using different types microphones	Knowledge of sound techniques, recording, mixing, editing, dubbing etc.
40-45	Shooting of different areas and topics such as sports, wild life, modeling, drama, documentary, serial, story board making, news, interviews, seminar / workshop, industrial, live broadcasting, musical events, advertisements etc.	Idea of different areas to be selected for shooting.
46	Idea & planning of production - proposal, scope, script, shot division, visualization according to script, different television terms - cues - commands etc. Accounts & estimating.	Knowledge of idea & planning for production, qualities of a production, principle of direction during production, objectives to be coped with during pre-production, production and post production etc. Equipment requisition & script.
47-51	<b>Project Work ( Script Base Video Film Making )</b>	
52	<b>Revision &amp; Test</b>	

**List of tools and equipments for the trade of “Digital Film Photographer” under CTS**  
**(for a batch of 16 trainees)**

Sl. No.	Items	Qty. (nos.)
1.	Twin lens reflex camera	1
2.	Single lens reflex 35 mm camera with normal lens and hood	1
3.	Single lens reflex 35 mm camera with autofocus lens and hood	1
4.	Digital Still Camera flash card type (Latest model)	2
5.	Digital SLR Camera with CamCorder (Latest model)	1
6.	Digital SLR Camera with detachable recorder (Latest model)	1
7.	Handycam	2
8.	Wide angle lens matchable with Digital SLR camera (24mm, 35mm)	1 each
9.	Telephoto lens matchable with Digital SLR camera (210mm, 300mm)	1 each
10.	Zoom lens matchable with Digital SLR camera (28-70mm, 70-300mm)	1 each
11.	Fish eye lens matchable with Digital SLR camera (17 mm)	1
12.	Camera stand for still camera	1
13.	Camera stand for video (low base)	1
14.	Cable release	2
15.	Different types of filters, (10 types) matchable with camera (Graduated, Star filter, multi image, ND, Sky light, polarizer, colour filter set, 80B, both for video & still)	1 each
16.	Extension ring (4 types)	2
17.	Electronic flash gun (Manual & auto) Different types with slave unit	4
18.	Studio light	4
19.	Spot light	2

20.	Electronic umbrella light	4
21.	Air conditioner for studio (1.5 ton)	4
22.	Exposure meter	2
23.	Studio room (30ft. x 30ft. x 18ft. height) fitting with cataract system, light grid, sound proof, AC, with cyclorama	1 room
24.	Studio & class room furniture	
	a) Steel chairs folding type with arm rest for trainees	18
	b) Working table moulded	18
25.	Computer with multimedia facility and CD writer, floppy drive, CD drive, Zip drive, video capture card (latest configuration) Connected with LAN	9
26.	Inkjet printer with colour cartridge(1200 dpi or higher)	2
27.	Laser printer with colour cartridge (1200 dpi or higher)	2
28.	Scanner (1200 dpi or higher)	2
29.	UPS (5 KVA)	1
30.	Windows operating system 2000 or latest version	1
31.	Photo editing software like photoshop etc.	1
32.	MS-Office 2000 or latest version	1
33.	Free Hand latest version	1
34.	Flash latest version	1
35.	Director latest version	1
36.	Sound Forge latest version	1
37.	Digi Mix latest version	1
38.	Anti Virus software latest version	1
39.	Table for computer, printer and scanner	9
40.	Chairs for computer classes	17
41.	CD writable (latest capacity)	100
42.	CD Re-writable (latest capacity)	50
43.	Floppy (latest capacity)	200

44.	Zip Cartridge	10
45	Reflectors (Folding Portable)	4
46.	Cool light	4
47.	Multi 10 & Multi 20	10 each
48.	Hard Soft	6
49.	Sun Gun	6
50.	Porto pack light	3 sets
51.	Tape matchable with the camera	As per requirement
52.	Slide & film scanner with adapter for A3	1
53.	Slide & film scanner with adapter for A4	1
54.	VCR according to digital camera	1
55.	VCR with play back adapter for camcorder	1
56.	Play back adapter for video camera	1
57.	Battery charger for still camera	1
58.	Battery charger for video camera	1
59.	Battery for digital SLR camera	12
60.	Battery for digital video camera	12
61.	Microphone (boom)	1
62.	Microphone (lapel)	2
63.	Trolley set 30 ft.	1
64.	Round trolley 30 ft.	1
65.	Cable	Sufficient
66.	Extension Board	Sufficient
67.	BNC cable with various connector (80 ohms) 440 volt 3 phase line	Sufficient
68.	Fire extinguisher	4

**Optional Tools & Equipments :**

1)	Over head projector with screen	1
2)	LCD Projector	1
3)	Digital ProLab Processing equipment	1