

West Bengal State Council of Technical &
Vocational Education and Skill
Development
(Technical Education Division)



Syllabus
of

Diploma in Photography [PHO]

Part-III (5th Semester)

Revised 2022

Photography						Evaluation Scheme of Theoretical Paper				Evaluation Scheme of Practical/Sessional					Total Marks
Semester V	L	T	P	Contact Hours	Credit	Internal Scheme			End Semester Examination	Continuous Assessment			End Semester Assessment		
						Mid Sem Test	Class Assignment	Class Attendance		Teacher's Assessment & Laboratory Notebook	Class Performance	Class Attendance	Viva-Voce	Assignment on the day of Viva-voce	
Motion Picture Photography I	3	0	0	3	3	20	10	10	60						100
Videography II	3	0	0	3	3	20	10	10	60						100
Programme Elective II: Introduction to film studies	3	0	0	3	3	20	10	10	60						100
Filming and Editing Technique I	3	0	0	3	3	20	10	10	60						100
Filming and Editing Technique Lab	0	0	3	3	1.5					30	20	10	20	20	100
Videography II Lab	0	0	0	3	1.5					30	20	10	20	20	100
Multimedia and Animation Lab II	0	0	3	3	1.5					30	20	10	20	20	100
Major Project (Video Production)	0	0	3	2	1										100
Internship II (after Sem IV)	0	0	0	0	1						100				
				23	18.5										900

Photography						Evaluation Scheme of Theoretical Paper				Evaluation Scheme of Practical/Sessional					Total Marks					
Semester VI	L	T	P	Contact Hours	Credit	Internal Scheme			End Semester Examination	Continuous Assessment			End Semester Assessment							
						Mid Sem Test	Class Assignment	Class Attendance		Teacher's Assessment & Laboratory Notebook	Class Performance	Class Attendance	Viva-Voce	Assignment on the day of Viva-voce						
Motion Picture Photography II	3	0	0	3	3	20	10	10	60						100					
Filming and Editing Technique II	3	0	0	3	3	20	10	10	60						100					
Light and Sound in Motion Picture Photography	3	0	0	3	3	20	10	10	60						100					
Entrepreneurship and Start-ups	3	0	0	3	3	20	10	10	60						100					
Open Elective I : Engineering Economics and Project Management	3		0	3	3	20	10	10	60						100					
Open Elective II : Industrial Management Or professional Orientation Or Disaster Management	3		0	3	3	20	10	10	60						100					
Filming and Editing Technique Lab II	0	0	2	2	1										30	20	10	20	20	100
Major Project (Short Film Production)	0	0	3	3	1.5															100
Seminar	1		0	1	1															
				24	21.5										800					

Syllabus for Filming & Editing Techniques I-Theory

Name of the Course : PHOTOGRAPHY	
Name of the Subject: Filming & Editing Techniques I	
Course Code :	Semester: Fifth
Duration: 17 weeks	Maximum Marks: 100
Teaching Scheme :	Examination Scheme :
Theory : 3 contact Hour/week.	<i>Internal Examination : 20 Marks</i>
Tutorial : 1contact Hour/week	Class Test : 10 Marks
Practical : Filming & Editing Technique Lab I	Teacher's Assessment: 10Marks
Credit : 3	<i>End Semester Examination : 60 Marks</i>
Aim:	
1.	To develop the knowledge & skill of Editing Techniques in Motion Picture Photography.
2.	Students will understand the knowhow of the Editing techniques for Motion Picture Photography and can function either as an entrepreneur or can take up jobs in the film industry.
Objectives - The student will be able to	
1.	The techniques of script formation from a concept.
2.	Understand the techniques of a script writing.
3.	Understand the techniques of scene and short breakdown.
4.	Understand the basics of screen technique.
5.	The necessity of editing.
6.	The principles of editing.
Pre-Requisite -	
1.	Basic concept of Editing.
2.	Basic knowledge of computer operating.

Contents: Total Periods: 60(15Weeks) +08(2Weeks) =68 (17Weeks)

Content (Name of Topic)		
Group-A		
	Filming	
Module 1	1. Introduction to script : (To develop a story –board from an idea/concept) 2. Writing a script: (To read and analyse different genres of screen plays) 3. Scenes and shots: (Breakdown of a screen play into scenes and shots) 4. The screen technique : (i) Joining of shots and scenes (ii)The cut and types of cut (iii)The imaginary line (iv)Basic movements Other transitions i.e. fade, mix, etc.	30
Group-B		

	Editing	
Module 2	1. Necessity of editing : (To analyse the reasons of editing) 2. Principles of editing : (To analyse different editing principles)	15
Total		45

EXAMINATION SCHEME

Internal Examination Marks – 20			Marks on Attendance:05		
End Semester Examination Marks – 70			Teacher's Assessment :05		
Group	Module	Objective Questions			Total Marks
		To be Set	To be Answered	Marks per Question	
A	1	15	Any Twenty	1	20×1=20
B	2	10			
Group	Module	Subjective Questions			Total Marks
		To be Set	To be Answered	Marks per Question	
A	1	5	Any Five Taking At Least One from Each Group	8	8×5 =40
B	2	3			

Name of Authors	Title of the Book	Publisher
Ken Dancyger	Technique of film and video editing. Theory & Practice.	
J.D.Andrews	The major film theories.	
Reisz and miller	The techniques of film editing.	
S.E Browne	Video editing: A post production	
Allen and Gomery	Film history: Theory and practice.	
Roy, Thompson	Grammer of edit	
A.Rajadhyaksha	Encylopaedia of indian cinema.	

Note 1: Teacher's assessment will be based on performance on given assignments & quizzes.

Note 2: Assignments may be given on all the topics covered on the syllabus.

Syllabus For MOTION PICTURE PHOTOGRAPHY – I-THEORY

Name of the Course : PHOTOGRAPHY	
Name of the Subject: Motion Picture Photography -I	
Course Code :	Semester: Fifth
Duration: 17 weeks	Maximum Marks: 100
Teaching Scheme :	Examination Scheme :
Theory: 3 contact Periods /week.	Internal Examination : 20 Marks
Tutorial : 1 contact Period/week	Class Attendance : 10 Marks
Practical : Workshop	End Semester Examination : 60 Marks
Credit : 3	Teacher's Assessment: 10 Marks
Aim:	

1.	The student should know the basic concepts of handling the motion picture camera.
2.	The students should know the concept of difference between still cameras and motion picture cameras.
Objectives - The student will be able to	
1.	understand the concept of the basic principles of motion picture photography ;
2.	understand the concept and technique of cinematographic properties ;
3.	Understand the different types of operations and movements
Pre-Requisite -	
1.	Basic knowledge of camera operation.
2.	Interest in cinematography.

Contents: Total Periods: 60(15Weeks) +08 (2Weeks) =68(17Weeks)

Content (Name of Topic)		
Group – A		Periods
Module 1	Introduction to motion picture photography- Movement of frame, movement within a frame; anatomy of human eye, binocular vision, persistence of vision, acuity (circle of confusion), flicker perception of human eye and how motion is created from a series of static frames perception of colour, adaptive properties.	5
Module 2	Cinematographic properties – Basic shot terminology : Close up, Mid shot, Long shot, Big close up, Mid-long shot, Extreme long shot, Point of view (POV) shot, Over-the-Shoulder(OTS) shot, high angle and low angle shot, top angle shot. Introduction to the concept of Imaginary line (180 ⁰); matching of action, direction of the movement and look. Reverse angle.	10
Group-B		
Module 3	Operations and movements- Pan, tilt, trolley, dolly, crane, steady – cam	5
Module 4	Different film Formats (16 min, 35 mm, 70 mm) and aspect ratios.	5

Group – C		
Module 5	Exposure determination for motion picture camera. i. Introduction to zone system as a scientific tool for exposure. ii. Exposure value (Ev), Exposure Latitude. iii. Exposure meter; Incident and reflected (one degree spot meter). iv. Exposure control; F-stops and T-stops.	10
Module 6	i. Introduction to various picture negatives available in the market. ii. Colour temperature, MIREd value, MIREd shift. iii. Colour temperature meter. iv. Use of filters for colour cinematography : colour-conversion, v. colour compensating (CC), light balancing (LB), vi. neutral density (ND) and other special effect filters, filter factor. vii. Use of filters for B/W cinematography. viii. Day-for-night cinematography.	10
Total		45

EXAMINATION SCHEME

Internal Examination : Marks - 20 Marks on Attendance : 05
End Semester Examination : Marks - 70 Teacher's Assessment : 05

Group	Module	Objective Questions			Total Marks
		To be Set	To be Answered	Marks per Question	
A	1, 2	9	Any Twenty	1	20×1=20
B	3, 4	6			
C	5, 6	10			
Group	Module	Subjective Questions			Total Marks
		To be Set	To be Answered	Marks per Question	
A	1, 2	2	Any Five Taking At Least One from Each Group	8	5 × 8 =40
B	3, 4	2			
C	5, 6	4			

Text Books	
Name of Authors	Title of the Book
G. Hirschfield	Image control
Ohanian and Phillips	Digital film making
F.L.Hirshy	Optics and focus for camera assistants
Samuelson	Hands-on manual for cinematographer
Peter Word	Picture composition
Samuelson	Motion picture camera techniques

Note 1: Teacher's assessment will be based on performance on given assignments & quizzes.

Note 2: Assignments may be given on all the topics covered on the syllabus.

Syllabus For Videography II-THEORY

Name of the Course : PHOTOGRAPHY	
Name of the Subject: Videography : II	
Course Code :	Semester: Fifth
Duration: 17 weeks	Maximum Marks: 100
Teaching Scheme :	Examination Scheme :
Theory: 3 contact Hour/week.	Internal Examination : 20
Tutorial : Nil contact Hour/week	Class Attendance : 10
Practical : Workshop	End Semester Examination : 60
Credit : 3	Teacher's Assessment: 10
Aim:	
1.	A student might have good theoretical knowledge in videography, and should know the difference between the video camera and film camera. They should know the different functions of a video camera.
2.	The students should have adequate knowledge in videography, so that they can operate the camera in different situations individually.
Objectives - The student will be able to	
1.	Understand the techniques of image reproduction;
2.	Understand the techniques of Charged Coupled Device
3.	Understand the techniques of camera lens controls
4.	Understand the techniques of horizontal phase and sub-carrier phase
5.	Understand the basic principles video and audio recording
6.	Understand the techniques of TV transmission
Pre-Requisite -	
1.	Basic theoretical knowledge in Videography.
2.	Knowledge of basic camera hardware & software is also necessary.

Contents: Total Periods: 60(15Weeks) +08(2Weeks) =68(17Weeks)

Content (Name of Topic)		Periods
Group A		
Module 1	i) Reproduction of image : Cathode Ray Tube (monochrome and colour) Liquid Crystal Display (LCD), professional studio monitor and its controls, High Definition Television (HDTV) ii) Charged Coupled Device (CCD): Interline Transfer (IT), Frame Transfer (FT) Frame Interline Transfer (FIT) Hole Accumulation Diode (HAD) Sensor, Application of electronic shutter to CCD image sensor	10
Module 2	i) Camera Lens Controls: Focus, auto/manual, zoom servo/manual, iris auto/manual, built in filters (day light, artificial light, neutral density), MTF curve. ii) Electronic viewfinder controls: Monochrome, colour, LCD, brightness, contrast, peaking or details, etc., zebra, spot L, Back L	05

Group B		
Module 3	In-camera control: Gain(expressed in dB) high, standard, low, hyper gain, Dynamic Contrast Control(DCC) Dynalatitude (DL).master pedestal or master black stretch, detail, , black balance and white balance, back focus, macro focus.	05
Module 4	i)Time code: Longitudinal (LTC) and Vertical Interval Time Code (VITC), Capstan Tracking Logic (CTL), U-Bits, Cassette Memory (CM), Clip-link, Serial Digital Interface (SDI) ,memory stick. ii)Horizontal phase and sub-carrier phase. iii)Wave form monitor and vectroscope, Camera Control Units (CCU)	05
Group C		
Module 5	Video and audio recording. A.V.T.R. (Betacam and other digital recorders) B .Camcorder. (Betacam and other digital camcorders) C. Video tape and recording formats. Television studio operations a. On line recording with multiple camera set up. b. Control units for camera and audio. c.Panels. d. Light controls.	10
Module 6	i) Video editing. a.Linear (insert and assemble modes) b.Editing equipment : Edit VTR, Edit Control Unit, Vision Mixer, c.Computer Graphics (C.G.) etc. d.Non-linear e.Recording of audio (commentary, dubbing, music). f. .Effects (visual and audio) ii) TV Transmission	10
Total		45

EXAMINATION SCHEME

Internal Examination :		Marks - 20	Marks on Attendance : 05		
Final Examination :		Marks - 70	Teacher's Assessment : 05		
Group	Module	Objective Questions			Total Marks
		To be Set	To be Answered	Marks per Question	
A	1,2	10	Any Twenty	1	20×1=20
B	3,4	7			
C	5,6	8			
Group	Module	Subjective Questions			Total Marks
		To be Set	To be Answered	Marks per Question	
A	1,2	3	Any Five Taking At Least One from Each Group	10	5 ×10 =50
B	3,4	3			
C	5,6	2			

Note 1: Teacher's assessment will be based on performance on given assignments & quizzes. Note 2: Assignments may be given on all the topics covered on the syllabus.

Name of the author(s)	Name of the book.
Peter Jarvis	The essential TV handbook
J. Watkinson	The art of digital video
Arthur C. Luther	Video camera technology
C. Gordon	The guide to high-definition video production
Rumsey & Watkinson	The digital interface handbook
J. Watkinson	MPEG-2
R.H.Kallenberger	Films into video

Syllabus For : Major Project (Video Production)

Name of the Course : PHOTOGRAPHY	
Name of the Subject: Major Project (Short Film Production)	
Course Code :	Semester: Fifth
Duration: 15 weeks	Maximum Marks: 100
Teaching Scheme :	Examination Scheme :
Theory: Nil contact hours/week.	Internal Examination : Nil
Tutorial : Nil contact hour/week	Class Attendance : Nil
Practical : 3 Periods/Week	End Semester Examination : 100 Marks
Credit : 1.5	Teacher's Assessment: Nil
Aim:	
1.	The course is carried out to give the students an industrial exposure.
2.	The diploma holders in this discipline are expected to have professional skills so that they can produce the job individually.
Objectives - The student will be able to	

1.	Understand the necessity of a concept or story.
2.	Understand the techniques of script writing.
3.	Understand the necessity of controlling production cost.
4.	Understand the necessity of planning a production.
Pre-Requisite -	
1.	Thorough theoretical and practical knowledge for successful production of a short film.

Content (Name of Topic)		Periods
	1. Preparation of script: fiction or non-fiction. 2. Shooting of the script in film. 3. Edit of the rushes / footages with sound. 4. Review and final correction. Assessment will be done on the basis of : 1.Camera : operation , composition , movement , use of lens etc. 2. Effective use of light and sound . 3.Sense of editing. 4.Other technical considerations executed in the project. Note : The project guide will specify the duration of the project .	
Total		45

Note 1: Teacher's assessment will be based on performance on given assignments & quizzes. Note 2: Assignments may be given on all the topics covered on the syllabus

Syllabus For Programme Elective II-Introduction to Film Studies

Name of the Course : PHOTOGRAPHY	
Name of the Subject: Programme Elective II-Introduction to Film Studies	
Course Code :	Semester: Fifth
Duration: 17 weeks	Maximum Marks: 100
Teaching Scheme :	Examination Scheme :
Theory: 3 contact Hours/week.	Internal Examination : 20 Marks
Tutorial : 1 contact Hour/week	Class Attendance : 10 Marks
Practical : NIL	End Semester Examination : 60 Marks
Credit : 3	Teacher's Assessment: 10 Marks
Aim:	
1.	The student can choose their individual interest area as an elective subject.
Objectives - The student will be able to	
1.	Understand the necessity of a concept of story.
2.	Understand the story and its cinematic transformation.
3.	Understand the techniques of making non-fiction.
4.	Understand the techniques of target viewer.
5.	Understand the techniques of script writing.
6.	Understand the necessity of planning a production.
Pre-Requisite -	
1.	Basic knowledge of cinema.
2.	Keen interest in cinema.

Content (Name of Topic)		Periods
Group A		
Module 1	1. Concept /story: (Transformation of a concept into a story) 2. Fiction: (Story and its transformation into a film) 3. Non-fiction : (Different types and styles of making non-fiction)	10
Module 2	4. Docu-drama : (Transitional areas of fiction and non-fiction.) 5. Target viewer: (For whom a film is made)	10
Group B		
Module 3	6. Script writing: (Techniques of script writing: genres and auteurs.) 7. Script reading : (Comparative study of different genres of film scripts)	10

**Syllabus for :
Videography- II Lab**

Name of the Course : PHOTOGRAPHY Name of the Subject: Videography Lab	
Course Code :	Semester: Fifth
Duration: 17 weeks	Maximum Marks: 100
Teaching Scheme :	Examination Scheme :
Theory: Nil	Teacher's Assessment & Lab Note Book : 30
Tutorial : Nil	Class Attendance : 10
Practical : 3 contact Hour/week	Class Performance: 20
Credit : 1.5	Viva Voce: 20
Assignment on the day of Viva Voce: 20	
Aim:	
1.	The student will be able to use the different video equipment and their operations.
Objectives - The student will be able to	
1.	Understand the concept of handling the video cameras and their accessories.
2.	Understand the techniques of shooting etc.
Pre-Requisite -	
1.	Basic theoretical knowledge of videography.
2.	Able to work with co-worker.

Content (Name of Topic)	Periods
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Module 1	<ol style="list-style-type: none"> 1. Familiarization to record sound with a video camera. 2. Selection and use of different microphones and other in-camera recording modes 3. Shooting of a dialogue exercise: <ol style="list-style-type: none"> a. In an indoor situation b. In an outdoor situation (Inclusive of writing script, shot break- down etc.) 4. To shoot news coverage and other non- fiction subjects. Demonstration and practice with different models of camera, which are being presently used in the industry. 6. Process of Chroma Key Shoot and its Lighting 	
<u>Total</u>		45

Module 4	8. Crew meeting: (Importance of meeting with crew members before shooting.)	15
	9. Cost of production : (To estimate budget and production management.)	
	10. Planning of production: (To design schedule and production – planning for shooting.)	
Total		45

EXAMINATION SCHEME

Internal Examination : Marks - 20		Marks on Attendance : 05			
Final Examination : Marks - 70		Teacher's Assessment : 05			
Group	Module	Objective Questions			Total Marks
		To be Set	To be Answered	Marks per Question	
A	1,2	10	Any Twenty	1	20×1=20
B	3,4	15			
Group	Module	Subjective Questions			Total Marks
		To be Set	To be Answered	Marks per Question	
A	1,2	4	Any Five Taking At Least One from Each Group	8	5 ×8 =40
B	3,4	4			

Note 1: Teacher's assessment will be based on performance on given assignments & quizzes. Note 2: Assignments may be given on all the topics covered on the syllabus.

FLIMING AND EDITING TECHNIQUE LAB –I

Name of the Course : PHOTOGRAPHY	
Name of the Subject: FLIMING AND EDITING TECHNIQUE LAB -I	
Course Code :	Semester: Fifth
Duration: 17 weeks	Maximum Marks: 100
Teaching Scheme :	Examination Scheme :
Theory: Nil	Teacher's Assessment & Lab Note Book : 30
Tutorial : Nil	Class Attendance : 10
Practical : 3 contact hour/Week	Class Performance: 20
Credit : 1.5	Viva Voce: 20
	Assignment on the day of Viva Voce : 20
Aim:	
1.	The student should know the basic concepts of editing.
Objectives - The student will be able to	
1.	Understand the different editing techniques and style.
Pre-Requisite -	

1.	Basic knowledge of editing.
2.	Interest in cinematography.

Contents: Total Periods: 60(15Weeks) +08(2Weeks) =68(17Weeks)

Content (Name of Topic)		Periods
Module 1	Analysis of film and editing techniques of various styles and genres. Model texts will be used to familiarize different techniques of filmmaking and editing methods: <ol style="list-style-type: none"> 1. Fiction 2. Non-fiction 3. Practical demonstration of physical continuity of a sequence. 4. Practical demonstration of a dialogue situation. 5. Final Cut Pro/ AVID/Premier Pro Software 	
Total		45

Note 1: Teacher's assessment will be based on performance on given assignments & quizzes.

Note 2: Assignments may be given on all the topics covered on the syllabus.

Syllabus for: Multimedia & Animation-II Lab

Course Code:	Semester: Fifth (All Modules should be completed in 3rd semester. Evaluation may be done by continuous assessment process and by External Examiner in end semester)
Duration: Seventeen weeks/Semester	Full Marks:100
Teaching Scheme:	Teacher's Assessment and Lab Note Book : 30
Theory : Nil hrs./week	Class Performance : 20
Tutorial : Nil hrs./week	Class Attendance : 10
Practical: 3 hrs./week	Viva Voce : 20
Credit :1.5	Assignment on the day of Viva Voce : 20

Aim: To impart practical knowledge in Multimedia & Animation-II related with the study of Photography.

Objective: Student will able to

Sl. No	
1	Generation of Audio & Its editing with sound editing software
2	Be acquainted Video Capturing
3	Be acquainted with Video Editing with video editing software
4	Script preparation
5	Practicing Authoring work by using different Authoring software.

6	Practicing Project on Multimedia Application.
7	CD/DVD Writing.

Pre-Requisite: Nil

Sl.No			
1	Basic Skill of Computer operation & software is necessary.		
2	Basic knowledge in sound & video should be known		
3	Knowledge of developing Text, Image & Animation component for Interactive application.		
Contents: Total Periods: 45(15Weeks)+2Weeks(Internal Assessment) = 45(17 Weeks)		Hrs./Unit	Marks
Module : 1	Audio Editing		
	Audio Editing Software(Audition/Sound Forge)-The Interface , Importing, Recording of Audio through Microphone and Playback ,Audio Mixing & Editing work,Multitrack view, Looping Content, Restoration Tools, Working with video, Mastering and finalizing, Exporting, saving files/projects, Making CD.	06 periods	
Module :2	Video Capturing		
	Introduction to the capture card (Pinnacle, Miro DC 30 Plus), Capturing motion video i.e. Digitizing of Motion pictures by capture card, Conversion from AVI to MPEG Video, Compression & Decompression.	03 periods	
Module : 3	Video Editing		

	Getting Started with Adobe Premiere Pro video editing software -The Project Panel,The Timeline Panel, The Editing workflow , Transition basics, Effects control basics , Audiobasics, Titler Basics, Creating type and graphic effects, Advanced Tilting; Styles and Templates, Advanced Editing Techniques, Creating Motion effect. Usage of Chroma Key	09 periods	
Module : 4	Preparation of Script& Storyboard		
	Practicing script writing and preparation of storyboard for developing Interactive application.	03 periods	
Module : 5	Multimedia Authoring		
	Introduction to Authoring Software: a)Assymetric Toolbook II Instructor, b) Macromedia Director , Integration & interface to Text,	06 periods	
Module : 6	Preparation of a project to develop the multimedia application by after effect software	12& periods	
	Project conceptualisation,Design and Development		
Module : 7	CD&DVD production and replication process	06 periods	
	Practicing CD/DVD writing ,& Mastering &Packaging etc.		
Total		45 periods	

Name of Authors	Title of the Book	Name of the Publishers
Judith Jeffcoate	Multimedia in Practice - Technology & Applications	Prentice Hall, 1995
AndressHolzinser	Multimedia Basics, Vol-I	
John Villamil-Casanova, Louis Molina	Multimedia – An Introduction	Prentice Hall, 1998
Norman Desmorais	Multimedia on the PC	McGraw Hill Inc, 1994
Reference Books		
Linda Tway	Multimedia in Actions	AP Professional, 1995
Douglas E. Wolfgram	Creating Multimedia Presentations	QUE Corporation, 1994
Jessica Keys	The McGraw-Hill Multimedia Handbook	McGraw-Hill Inc., 1994
Francis Botto	PC Multimedia – An Introduction to Authoring Application	BPB Publication
Gokul. S	Multimedia Magic	BPB Publication, 1995
Sinclair	Multimedia on the PC	
SI. No.	Question Paper setting tips	