

**DETAILED SYLLABUS FOR THE POST OF PRODUCTION ASSISTANT IN  
KSFDC LTD.**

**CAT NO:277/2023**

**Module 1: Cinematography (20 Marks)**

Basics of Composition and Image Balance - Contrast & Affinity, Space, Perspective, Frame: Aspect Ratio - Rule of thirds, Symmetry, Pattern, Leading Lines, Diagonals, Filling Frame, Minimalism

Types of shots - Use of different angles, Tone, Colour and its Psychological effects

Objective & Subjective shots, Camera angles, lighting continuity, Cutting, Close-ups, Different camera angles for visual communication, Psychological effect, Shot Transitions

Light & its Characteristics

Camera Lenses - Type of Lenses - Lenses for Digital Cine Cameras

Digital Cameras and Image Reproduction

Sensitivity and ISO rating, Colour space conversion - Effective Application in Available Lighting situations - Matching Light Sources for accurate Colour Reproduction

Exposure and Image Control - Sensors & Image Processing - File Formats - Compressions, Resolution & Sharpness - Exposure Latitude, Dynamic Range, HDR - MTF and Contrast

Various Technical and aesthetic aspects of Lenses; Aberrations: spherical and chromatic. Advanced uses of varying focal length in storytelling.

Science and Techniques of ASPECT RATIOS Widescreen, Large Format / Anamorphic cinematography

Waveform, Parade, Histogram, Vectorscope – Primary Wheels: Lift, Gamma, Gain, Offset

Shooting in Logarithmic formats, understanding bitrate compressions, colour sampling, Colour spaces, RAW format, Dynamic range differences - Study of different Projection Formats of Digital Cinema -

Distribution Formats

Analysing the Cinematography of World/Indian master cinematographers - History and evolution of film formats and Contemporary Film Aesthetics

**Module 2: Editing (20 Marks)**

Understanding film Editing and its development in silent era - Development of editing from its inception to contemporary practices

Creating continuity in film editing

Different Types of Cuts

The various techniques and effects of Visual Transitions

Effective narrative construction in film editing

Involvement of Time, Rhythm & Space in film editing

Sound Emphasis in Editing

Colour Correction, Grading and DI

Incorporating visual and auditory elements for storytelling - Sound Editing for Narrative Impact

Understanding documentary editing - Understanding Sound Editing & Sound Design in Documentary

Application and execution of three camera input- vision mixer, Sound input, graphics & titles

Method of online edit (on-set edit) and principles of online editing - The co-ordination between the on-set Editor & the main Editor in incorporating the details - Advantages of scaling / resizing of High-Resolution videos during Editing.

Dramatic – Dialogue Editing in Narrative cinema – sound overlap, inserts, cutaways, and cut-ins

Narrative composed of internal rhythm, dialogues, pauses within dialogue, pace, parallel editing, jump cuts, montages - Sync track recording, Dubbing and sending footage for dubbing, Dub match, Ambient Track - Over laying room tone to smoothen over disturbance and glitches in sound track

Song Editing - Understanding Beat, Rhythm and Lyrics

Understand lyrics as narrative devices, shaping time-lapse, transitions, and development to condense storytelling segments

Song editing techniques in professional editing software Avid Media Composer

Understanding the role of editing in different film movements, the new ways of Collision of imageries, Juxtaposition, Quick cuts with unrelated visuals etc to form the philosophical dimension in meanings.

Explore the crucial role of editing in shaping the narrative and aesthetics of experimental cinema

### **Module 3: Sound (20 Marks)**

Sound as a wave form- description of transverse waves and longitudinal waves

Physical characteristics of waves viz frequency, wavelength, velocity, amplitude, phase, loudness, human hearing range

Sine waves, complex waves, square waves, triangular waves, white noise, pink noise, RMS and peak levels.

Periodic and non-periodic sounds, fundamental frequency & harmonics.

Spectrum of a sound wave- time domain & frequency domain representation of sound waves, pitch & frequency, timbre & harmonic content, Applications of White Noise & Pink Noise, frequency response & dynamic range, signal to noise(S/N) ratio

Basic Acoustics& the Human Hearing System

Microphones- different categories of microphones based on acoustic and transducer design (dynamic or moving coil microphones, ribbon microphones and condenser microphones).

Directional characteristics of microphones (polar patterns), Special Category Microphones- Pressure zone microphones (PZM or boundary microphones), lip microphones, parabolic microphones, lavalier microphones (wired & wireless), characteristics and design of studio microphones, microphones, comparison of studio

Basic layout of an audio mixer, location sound mixers (production mixers), Mixers for various applications viz. studio recording, live recording, radio and television broadcast, powered mixers, mixers and control surfaces

Location Sound Recorders (Field Recorders) and accessories, brief description of vintage location recorders (Nagra), Field Mixers, handling boom mounted microphones

Importing audio tracks from video editing workstations - importing AAF, OMF & MXF files into DAWs

Basic structure of loudspeakers, differences between active & passive loudspeakers, near field, mid field and far field monitors, technical specifications of loudspeakers, loudspeaker room interaction

Elements of sound design, how to design a scene, use of perspective to generate image, depth and emotional separation of characters, organizing tracks for sound editing, tips for editing dialogue, effects and music, sound for documentaries, noise removal techniques, noise removal software applications, technical and aesthetic aspects of sound editing preparation of tracks for ADR, matching ADR with location sound, editing ADR tracks, ADR for film, television and OTT platforms.

Different classes of amplifiers based on electronic circuit design - Amplifier specifications- Sensitivity, power output, frequency response, distortion, crosstalk, signal-to-noise ratio, impedance, damping factor, phase response, coupling, slew rate etc.

Basic features of loudspeakers, different categories of loudspeakers- Moving coil & electret loudspeakers, Active & passive loudspeakers, principles of horn loudspeakers, two way & three-way loudspeakers, crossover networks, subwoofers

Drive unit mounting & loading, Loudspeaker specifications- impedance, sensitivity, frequency response, power handling, directivity, Loudspeaker design limitations, setting up loudspeakers for various applications.

Behaviour of sound in enclosed spaces- Echo, reverberation, reverb time, reverberant sound level, direct sound, early reflections, standing waves, flutter echoes, comb filtering, Use of absorbers in acoustic treatment, porous absorbers, diaphragmatic absorbers, resonating absorbers, bass traps, Helmholtz resonators, variable acoustics, Musical instruments and their acoustic characteristics, stringed instruments, wind instruments, percussion instruments

Fundamentals of music, musical notes & harmony, hearing & pitch, tuning systems, melody, tempo, dynamic range, different approaches to miking for recording musical instruments- close miking, distant miking, accent miking, ambience miking, different classes of musical instrument- percussion instruments, acoustic string instruments, woodwinds, electronic instruments, virtual instruments, synthesisers & samplers, MIDI based recording, midi-based control surfaces.

#### **Module 4: Direction (20 Marks)**

Evolution of the Art of Cinema from the early period – from Actualities of Lumiere brothers to contemporary works.

Narratives and their significance - Developing narratives from facts and events - Stories and story writing - Story sources and materials. - Elements of a story - Understanding the facets of character - Developing a Narratives from observations, reports and other materials

Concept of film continuity and its principles - Physical continuity and the concept of Ellipsis - Unity of time and space - Screen Grammar. Image, Distance & Volume; Shot Matching –Matching Look, Position & Movement; Line of Interest - Screenplay as a blue print - Shots, Scenes and sequences- a distinction - Elements of a screenplay, formatting - Screenplay processes and steps

Historical overview, analysis, forms and politics of Non-Fiction filmmaking - Different types of treatment - Expository documentary, Impressionistic documentary, Explanatory documentary - Documentary movements: Cinema Verite, Direct Cinema, Free Cinema etc.

Dramatic Scene, writing a scene - Scene Design – Structure and function– Beginning, middle and end. Turning points. - Developing characters and their dialogues - Screen Dialogue – Dialogue and Conversation

How the actor prepares for a role / transform into the character-improvisation in space with camera. - Positive space acting, Negative space acting, Acting for films, Frame composition.

How the ideas are conceived and developed - Character development, Plot construction and organizing the narrative structure - Process of developing the treatment form synopsis - Process of adaptation from other sources - Scene construction - Introduction and exposition to screenplays and stories.

Understanding the role of a Costume designer and a Make-up artist - Understanding the Script and deciding the costumes - Research on Costume if related to Cultural and Historical references - Designing costume as per characterization - Uses of different types of make-up - Contribution of make-up in characterization.

Thorough understanding of the seven basic visual components - Idea of visual progression in narratives, ideas about set construction approaches to Art direction in cinema - Floor plan - Art direction in both studio space and real location.

Screenplay theories: Structure - Plot progression Devices –central conflict. Sub-plots. The thesis, anti-thesis, synthesis tempo. Crisis, climax and resolution. The denouement. Protagonist's arc – Sequences - Setting a good idea for a motion picture and examining its traits. With special emphasis on plot, central conflict, climax and resolution - Creating empathy, mood and to set up visuals.

Details on the process of Pre-production, Production and Post Production - Project Production Plan - Rights and Initial Contracts - Cast and Crew - Script Break down - Budgeting - Overview of the finalization of budget format, equipment, unit etc. - Locations and Permission - Shooting schedule - Production Design - Technical Recce - Shooting – Break down Sheet and Call Sheet - Script Supervision - Post Production workflow - Executive Producer and Line Producer – The roles and duties - Law and business essentials.

Introduction to the texts and sub texts of the written word in the script - Creative construction of cinematic space - Introduction to the aesthetics and aspects of Mise-En-Scene

### **Module 5: Criticism (20 Marks)**

History and evolution of film formats and Contemporary Film Aesthetics

Trends in motion and image dynamics, colour toning, approach of contemporary style to convey the authenticity. Explore an individualistic style of visual and pre-visualize a scene

The major milestone films in the evolutionary history of Cinema

The cultural and social factors and interpretation of visual images - Introduction to Semiotics - Gestalt principles and cognitive psychology

Classical Narrative structure in Cinema - Modern Narratives in Cinema - Nonlinear structures, fragmented narratives - Subjective storytelling techniques, multiple perspectives - Explorations and experiments in form

Analysing the Cinematography of World/Indian master cinematographers and discussing modalities of recreating a scene from the film.

Politics and social ideology of non-fiction film practice

Aesthetics and creative possibility of sound in cinema - Elements and relationship of Sound and Space in Cinema

**NOTE: - It may be noted that apart from the topics detailed above, questions from other topics prescribed for the educational qualification of the post may also appear in the question paper. There is no undertaking that all the topics above may be covered in the question paper**

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