#### ANDHRA PRADESH

# RECRUITMENT OF ASSISTANT PROFESSORS IN THE UNIVERSITY SYLLABUS FOR THE SCREENING TEST

## PHOTOGRAPHY SUBJECT CODE - 79

#### UNIT I

Camera Obscura, Joseph Niecephore Niepce, Louis Jacques Mande Daguerre, William Henry Fox Talbot, Gelatin Emulsion, George Eastman Kodak, Roll Film, Lala Deen Dayal. Types of Cameras: Pinhole camera, Box Camera, View Camera, Ranger Finder Camera, Twin Lens Reflex Camera, Single Lens Reflex Camera, Polaroid Camera, Panoramic Camera, Digital Single Lens Reflex, Mirror Lens Camera.Camera Formats: Large Format Camera, Medium Format Camera, 35 mm Camera.

#### UNIT II

Anatomy of Camera: Camera Body, Shutter, ISO, Film Plane, Digital back, Sensors: CCD, CMOS, Forveon. Histogram, image resolution (pixels), high dynamic range, Film Chamber, Storage Device, Penta Prism, View Finder: Optical View Finder, Electronic Viewfinder, Metering: Matrix or Evaluative Metering, Center-Weighted Metering, Spot Metering, Shutter: Leaf Shutter, Focal Plane Shutter. Shutter Release Button, Self-Timer, Dial. Modes: Program mode, Aperture Priority, Shutter Priority, Manual. Hotshoe, Lens mount, Camera Lens, Aperture, Diameter. Focus: Single area focus, Continuous focus, manual focus, focus stacking. Exposure Triangle: Aperture, Shutter Speed: Slow Shutter, Fast Shutter, ISO. Shooting modes: Single, Continuous. White Balance, Bracketing. Depth of Field: greater depth of field, shallow depth of field, Focal Length, Focal Distance, Hyper Focal Distance.

#### UNIT III

Visible Spectrum, Properties of Light: Reflection, Refraction, Dispersion, Diffusion, Absorption, Transmission. Angle of view, Types of Camera Lenses: Fish-Eye Lens, Ultra Wide Angle Lens, Wide Angle Lens, Normal Lens, Narrow Angle lens, Super Telephoto Lens, Macro Lens, Micro Lenses, Zoom Lenses. Zoom: Optical Zoom, Digital zoom, Filter: Dust Protector, UV, ND, GND, Polarizing Filter.

### UNIT IV

Characteristics of Light: Quality: Soft Light, Hard light. Quantity of light, Color Temperature, Direction of Light; Direct light, Indirect light. Source of Light-Natural Light: Direct Sunlight, Golden Hour, Twilight.Reflected Light, Ambient Light, Artificial Light: Continuous Light, Electronic Flash Gun, Ring Flash, Electronic Strobe Light, High Speed Synchronization; Action freeze, Splash. Slave, Trigger.

Key light, Fill Light, Top Light, Back Light, Ghost Light, Background Light, Flat Light Butterfly Light, Loop Light, Rembrandt Light, Cross Light or Split Light, Broad Light, Narrow Light, Silhouette, Low Key, Mid Key, High Key. Light Meter: Incident Light Meter, Reflected Light Meter. Light Shapers: Snoot, optical Snoot, Umbrella, Soft box, Strip, Octa, Barn door, Beauty Dish. Reflector, Flags, Gobos, V Flats. Monopod, Tripod.

### UNIT V

Elements of Art- Line: movement of line: Vertical lines, Horizontal lines, diagonal lines, curved lines, zigzag lines, Leading lines. Shape, Form, Colour, Texture, Size, Depth. Principles of Art; Balance: Symmetrical, Asymmetrical. Rhythm, Pattern, Emphasis, Contrast, Unity, Harmony, Movement. Elements of Composition; Rule of Thirds, Golden Mean, Perspective: Linear Perspective, Areal Perspective. Foreground, Middleground, Background, Horizon, Vanishing point, Negative Space, Positive Space, Scaling, Light Generated Primary Colours (RGB), Secondary Colours (CMY), Colour: Hue, Saturation. Art of Seeing; Look, observe, See, Describe, Analyze, Interpret.

## UNIT VI

Central Processing Unit (CPU), Input Devices: Keyboards, Mouse, Pointing Devices, Drawing Tablet, audio input devices, mic. Output devices: Display Screens, Printers, audio output devices. Storage devices: Hard disk drive, Solid State Drive, Pen drives, Cloud Based Storage. File Formats: NEF, RAW, TIFF, JPEG. Memory Cards: Compact Flash, Compact Flash Express, Secure Digital.

#### UNIT VII

Tools of Editing; Selection tools; Move tool: Transform tool, Marquee tool, Magic want tool, quick selection tool, Pen tool, Mask, Feather. Pixel editing tools: Clone Stamp tool, Spot healing tool, Patch tool, Eye dropper, Eraser tool, Dodge and Burn. Zoom tool, text tool, gradient/paint bucket. Camera Raw adjustments: Exposure, Contrast, Highlights, Shadows, Sharpness. Refine Edge: Hair selection.

### UNIT VIII

Photojournalism, half tone, origin of candid camera aesthetic, birth of Photojournalism, EDFAT, 5W 1 H, Spot News, Soft News, Photo Feature, E newspaper. Print Media advertising; Daily, Weekly Newspapers, Magazines, Pre-printed inserts. Electronic Media advertising; Radio & Television advertising. Indoor advertising; POP or POS; leaflets, flyers, promotional posters, catalogues, floor graphics, shop windows, promotional stands, pull up banner, Dangler. Outdoor advertising; Billboards, Center medians, poll boards, lollipops, traffic umbrellas, look walkers, Tricycle branding; with light, without light, with audio. Building warps, outdoor signage. Transit Advertising; auto stickers, auto hoods, bus shelters, bus stands, interior and exterior of busses, taxi, local trains, metro stations, metro rail, railway stations, airport branding. Other out of home advertising; aerial advertising, theoretical trailers, theoretical slides. Online advertising; social media advertising, google adds, website advertising, blogs advertising. Campaign advertising; Trade shows and exhibitions, roadshows, freebies, complimentary goods, door to door advertising.

#### UNIT IX

Forms of Mass communication, Print Media, Electronic Media, Cinema, Internet, Cross media, Watchdog, Gate keeping, verbal and nonverbal communication, intra-personal, inter-personal, Image Securing and watermark, The Classification of Genres of Photography; Head shots, Portrait Photography, Still Life Photography, Advertising Photography, Product Photography, Documentary Photography, Architectural Photography, Glamour Photography, Sports Photography, Wild Life Photography, Landscape Photography, Travel Photography, Fashion Photography, Photo Journalism, Fine Arts Photography, Street Photography, Nature Photography, Astro Photography, Food Photography.

## UNIT X

Persistence of vision, Cathode ray tube, Major functions of video camera; Gain control, iris, White Balance, ND Filter, Microphone, Focus hood, Viewfinder, LCD Screen, Lens, Shutter, Video signals – PAL, NTSC, SECAM. Types of Shots; Extreme close shot, Close shot, Close Mid shot, Mid Shot, Long mid shot, Long shot, Extreme long shot. Movements of video camera; Panning, Tilting, Track and Trolley, Jib arm, Crane, Gimbal, Sturdy Cam Zoom. Camera supports; Low base, Tripod, Tripod heads; Fiction heads, Fluid heads.

Videography for News Television and Entertainment television, Various stages of production, Preproduction, Production, Postproduction, Attachable view finders, lighting for video production, Soft light & Hard Light, Fresnel Lights, Regular tungsten lamps, overrun lamps, Tungsten Halogen, Gas Discharge lamps, Cool lights (florescent tubes), Warm lights (Fresnel Lights), LED lights. Reflectors, skimmer and cutters, grids, soft boxes, Voice over.

## UNIT XI

Linear Editing, Non-Linear Editing.Tools: Selection Tool, Track Selection Tool, Ripple Edit tool, Razor. Timeline, Key frames, Different Ways to Cut: Double Cut, Jump Cut, Insert Shots, Rough cut, Final cut.