SYLLABUS AND EXAM PATTERN FOR THE POST OF TECHNICAL ASSISTANT GR. I (EDITOR – ETV), GROUP B

Pay Level – 6 (₹35,400 – 1,12,400)

Nature of Duties (basis for the syllabus):

Editing and post-production of educational video content, including SWAYAM / MOOC lectures and e-content produced at the ETV studio; editing of scripts, captions and associated content; and video coverage, live streaming, live online switching (vision mixing) and editing, and production of highlight and promotional videos for institutional events.

Syllabus:

A. Theoretical Knowledge

1. Fundamentals of Video Editing and Visual Grammar

Principles and aesthetics of editing – continuity editing, the 180° and 30° rules, match cut, jump cut, cutaway, J-cut and L-cut, Types of shots, camera angles and camera movements, Montage, pacing, rhythm and timing, Transitions and their appropriate use, Narrative structure for instructional, documentary and promotional videos, Role of the editor in the pre-production, production and post-production workflow.

2. Digital Video Technology, Formats and Standards

Resolution (SD, HD, Full HD, 4K), frame rate, aspect ratio (16:9, 4:3, 9:16, 1:1), progressive and interlaced scanning, Codecs and containers (H.264, H.265/HEVC, ProRes, DNxHD/DNxHR; MP4, MOV, MXF), Bit rate, compression (intra-frame and inter-frame), chroma sub-sampling (4:2:0, 4:2:2), bit depth, Timecode, Colour spaces (Rec. 709, Rec. 2020), Broadcast-safe levels, Export and delivery specifications for YouTube, SWAYAM/NPTEL platforms, social media and archival masters.

3. Non-Linear Editing (NLE) Software and Post-Production Workflow

Hands-on understanding of Adobe Premiere Pro, DaVinci Resolve, Final Cut Pro or equivalent tools, Project set-up, ingest, media management, bins and sequence settings, Proxy and optimized-media workflows, multi-camera editing and audio–video synchronization, Nesting, adjustment layers, speed ramping and stabilization, Rendering, render queues and batch export (Adobe Media Encoder or equivalent), Project archiving and consolidation.

4. Colour Correction and Grading

White balance, exposure and contrast correction, reading video scopes – waveform, vectorscope, RGB parade and histogram, Primary and secondary colour correction, masks and qualifiers, Shot matching across cameras and sessions, Use of LUTs, skin-tone correction, Maintaining consistent visual identity across a course or series.

5. Audio for Video Production

Types of microphones (lavalier, shotgun, handheld, boundary) and their applications, Audio levels (dBFS), headroom, clipping, Loudness standards (LUFS; EBU R128) for broadcast and online platforms, Noise reduction, equalization, compression, de-essing, Voice-over recording and dubbing, Syncing external audio, Background music, sound effects and music licensing, Adobe Audition, Audacity or equivalent tools.

6. Graphics, Titles, Animation and Visual Effects

Titles, lower thirds, name supers, slates and end credits, Motion graphics and animated text using Adobe After Effects or equivalent, Chroma keying (green/blue screen) and compositing, Picture-in-picture layouts for lecture videos with presentation slides, Integration of screen recordings, animations and simulations, Institutional branding – logos, templates, colour palettes and typography.

7. Educational Video and e-Content Production (SWAYAM / MOOCs)

Overview of SWAYAM, NPTEL and other national MOOC platforms and their national coordinators, Four-quadrant approach to e-content (e-Tutorial, e-Content, Self-assessment, Discussion forum), Formats of educational video – talking head, lecture with slides, lightboard, screen-cast, interview, animation and field footage, Script and storyboard development in coordination with subject matter experts, Instructional design basics (ADDIE) and principles of multimedia learning (segmenting, signalling, coherence), Optimal video length and modular chunking, Accessibility – subtitles and closed captions (SRT/VTT), transcripts and multilingual versions, Quality review, correction cycles and final approval before upload.

8. Camera, Lighting and Studio Operations

Camera operation – exposure triangle (aperture, shutter speed, ISO), focus, depth of field, 180° shutter rule, Lenses and focal lengths, Composition – rule of thirds, headroom, lead room, eye-line, Three-point lighting, colour temperature and white balance, Studio set-up for lecture recording – teleprompter, green screen, backdrops, audio booth, Video switchers, capture devices and recording systems, Care and routine maintenance of studio equipment.

9. Institutional Event Coverage and Live Streaming

Planning coverage for institutional events such as convocation, conferences, professional development programmes, workshops and official visits – shot lists, camera placement and crew coordination, Multi-camera live production, live online switching and vision mixing, Live streaming using OBS Studio, vMix, YouTube Live or equivalent – encoder settings, bandwidth and redundancy, Recording of hybrid and online events (Zoom, MS Teams, Google Meet), Highlight videos, recap reels, teasers and promotional videos, Vertical short-form video for Instagram, YouTube Shorts and other social media, Photo and video documentation for institutional records, reports and the digital media repository.

10. Script Writing, Content Editing and Language for Media

Writing scripts, narration and voice-over text for educational and promotional videos, editing scripts and on-screen text for accuracy, clarity, grammar and consistency, Writing video titles, descriptions, keywords and tags, Proof-reading of captions and subtitles, Tone and style for official institutional communication in English and Hindi (bilingual requirements of Official Language policy).

11. Media Asset Management, Copyright and Ethics

File naming conventions, folder structure, bins and metadata, Storage and backup – external drives, NAS, RAID, cloud storage, 3-2-1 backup rule, Prevention of media loss – data verification (checksums), redundancy and recovery of corrupted or lost media, Digital archiving and retrieval of institutional video content, Indian Copyright Act, 1957 – copyright terms and duration, ownership of e-content, fair dealing, Creative Commons licences, royalty-free and stock media, Consent and release forms, privacy, and ethical use of images and footage, Guidelines for Indian Government Websites (GIGW) and accessibility norms.

12. Emerging Trends in Video Production

AI-assisted editing tools – automatic transcription and captioning, text-based editing, scene detection, noise removal, AI voice-over and dubbing, generative visuals, Cloud-based collaborative review (Frame.io or equivalent), 360° video, virtual production, AR/VR and immersive content for education, Ethical and responsible use of AI-generated media, including disclosure and deep-fake awareness.

B. Practical / Skill Areas

- Editing raw lecture footage into a SWAYAM-ready video with slides, picture-in-picture, titles and intro/outro
- Multi-camera editing and synchronization of audio and video from separate sources
- Chroma keying (green/blue screen) and multi-layer compositing of the presenter with slides, virtual backgrounds and graphics
- Colour correction and shot matching using video scopes
- Audio clean-up, noise reduction and loudness normalization to a specified target
- Producing an event highlight video and a vertical short-form version for social media
- Use of AI-assisted tools for transcription, captioning, noise removal and text-based editing, with verification and correction of AI-generated output
- Language correction and proof-reading of scripts, captions, subtitles (SRT) and on-screen text; creating titles and lower thirds
- Binning and organizing media within the NLE project, exporting in specified formats, and archiving projects with proper naming, metadata and backup