

**PATHOLOGY SYLLABUS (Comprehensive) FOR VOP TO THE POST OF  
SCIENTIFIC ASSISTANT (Lab)**

1. Histopathology techniques
  - a. Tissue processing for routine formalin-fixed paraffin-embedded tissue
  - b. Section cutting and microtomy, including cryomicrotomy for muscle biopsies
  - c. Artefacts related to section cutting and troubleshooting
  - d. Frozen section and squash smear preparation
  
2. Staining
  - a. Haematoxylin and eosin
  - b. Masson's trichrome
  - c. Verhoff van Gieson
  - d. Luxol fast blue
  - e. Lugol's iodine
  - f. Reticulin stain
  - g. Kulchitsky-Pal stain
  - h. Alcian blue
  - i. Ziehl-Neelsen stain
  - j. Grocott's methenamine silver
  - k. Periodic acid Schiff
  - l. Congo red
  
3. Muscle enzyme histochemistry and immunohistochemistry
  - a. Modified Gomori's trichrome
  - b. Enzyme histochemistry for NADH-TR, SDH, COX-SDH and ATPase pH 9.4 and 4.6
  - c. Muscle immunohistochemistry on cryosections
  
4. Immunohistochemistry on formalin-fixed, paraffin-embedded tissue
  
5. Immunology tests:
  - ELISA (ANCA, APLA, dsDNA, Thyroglobulin, Thyroperoxidase, AChR, MUSK, Titin)
  - Indirect immunofluorescence tests (ANA, AQP4-MOG, VGKC, NMDA, Autoimmune encephalitis panel)
  - Immunoblots
  - Test for Oligoclonal bands: CSF & Serum

  
**ADMINISTRATIVE OFFICER Gr. I (e/c)**  
**SCTIMST**