# Tissues and Stains Required for the Histotechnology Certificate Program

## **Tissues**

Liver Kidney Skin

Cylindrical tissue (with lumen), eg: tube, appendix Walles structures – colon, stomach or gall bladder

Dense tissue – eg: cervix, uterus Bloody tissue – endometrium or spleen

## **Stains**

#### Microorganisms

Acid Fast Bacilli (AFB) - Kinyoun or Ziehl Nielson method

Fungus - Gomori's Methenamine Silver (GMS)

Helicobacter Pylori – Giemsa or Steiner modification for H.Pylori Use stomach tissue containing H. Pylori

### Carbohydrate

Acid Mucosaccharides - Alcian Blue, pH 2.5 with and without hyaluronidase disgestion Umbilical cord is for for this stain

Glycogen – PASH (Periodic Acid Schiff with Hematoxylin counterstain)
Liver with glycogen is good to use for this stain
Skin also can be used

Neutral Mucins – Mucicarmine
Use small intestine, colon or appendix

#### **Connective Tissue**

Collagen & Muscle - Masson Trichrome

Elastic Fibers – Verhoeff Van Gieson (VVG) or Gomori's Aldehyde Fuchsin Blood vessel wall contains elastic fibers

Reticular Fibers – Use a Reticulin stain that is used in your laboratory Spleen, Lymph Node and Liver are good sources to use for this stain.

#### **Pigments & Minerals**

Ferric Iron - Prussian Blue reaction (Iron Stain)

Melanin – Fontana Masson Skin is generally a good tissue for this stain