EXAMINATION FOR CYTOTECHNICIANS

Basic qualification and experience in Higher Secondary in biological Sciences cytology with diploma in Medical Lab. Technology/ certificate course and one year experience in cytology.

OR

Higher secondary in biological Sciences with 5 years experience in cytology

OR

B.Sc. Medical with 6 months experience in Cytology

1. Schedule of examination

i) Examination should consist of theory, practical & viva-voce

ii) Theory paper (100 marks) : Should have 40 MCQs (40 marks); 5 matching type question (20 marks) and 8 short answer questions (40 marks) (duration 3 hours)

iii) Distribution of theory questions should be as follows:

Basic cytology 20%
Gynaecological cytology 20%
Non-gynaecological cytology
Including FNAC 20%
Techniques 40%

iv) Practical: 100 marks

Practical: To have 3 practical exercises:

i) Papanicolaou stain (10)

ii) Preparatory techniques/Cytospin/Millipore filter preparation etc. (14)

iii) Special stain/MGG etc (10)

Spots: Consisting of 15 objective structure practical examination stations.

i) 7 stations on instruments. (7x2=14)

ii) 8 stations on indentation of cells etc. (8x4=32)

Total marks: 80

A candidate has to pass separately in theory and practical + viva voce. A candidate must secure at least 50% in each.
Fees ₹ 600/- (by a bank draft drawn in favour of Treasurer, Indian Academy of Cytology)

Certificate A certificate will be issued to successful candidates.

Time of examination Around September / October of every year

COURSE FOR CYTOTECHNICIAN

i) Staining of cytopathology Specimen
   a) Principles of fixation and various fixatives used.
   b) Papanicolaou staining-principles, advantages and techniques.

ii) Centrifugation techniques
    a) Centrifugation principle and applications.
    b) Cytocentrifuge - principle and applications.
    c) Membrane filters - principle and applications.

iii) Cytochemistry
     a) Routine cytochemistry staining procedure like MGG, alcian blue, mucicarmine, PAS, fat stain etc.
     b) Basic principles of immunocytochemistry, cell block preparation
     c) Liquid Based Cytology

iv) Female Genital tract
    a) Anatomy, structure & physiology of female genital tract.
    b) Various techniques of collecting material from female genital tract.
    c) Various types of cells from female genital tract
    d) Cytology of uterine cervix.

v) Respiratory tract
   a) Anatomy and physiology of respiratory tract.
   b) Collection and preparation (of sputum, TBNA, BAL fluids) including LBC and cell block preparation

vi) Urinary tract
    a) Anatomy and physiology of urinary tract
    b) Collection and preparation (Millipore filter technique, cytospin, LBC etc).

vii) Gastro-intestinal tract
     a) Anatomy and physiology of gastrointestinal tract.
b) Processing and collection of material from gastrointestinal tract and its preparation.

viii) **Effusion**
   a) Anatomy of serous cavities
   b) Processing and Collection and preparation of fluid for cytological examination.

ix) **Introduction of cytogenetics (Molecular biology)**
   a) Collection of material and staining for sex chromatin.
   b) Culture of lymphocytes and making smears and staining.
   c) Preparation and processing knowledge of preparation of Cytological material for PCR/RT PCR/Microarray/Gene sequencing.

x) FNAC: Preliminary knowledge on **fine needle aspiration** cytology, preparation of smears and staining.