

Topic: ONE YEAR CERTIFICATE COURSE IN LABORATORY MEDICINE

(Note: This course is independent of the ICP recognized PDCC in Laboratory Medicine)

Brief info:

The course is designed to uplift knowledge in the subject of Laboratory Medicine and to impart continuous education to those candidates who desire to have a first-hand experience at centers of excellence that are equipped with state-of the art equipment and processes that are in tune with modern advances in this discipline.

COURSE DURATION: 1 Year

ELIGIBILITY CRITERIA: MD or DNB in Pathology / Transfusion Medicine, Diploma in clinical Pathology, MD Biochemistry, MD Microbiology. The degree should have been obtained from a recognized institution.

There is no age limit.

NUMBER OF SEATS: **TWO** per session

- A) **COURSE CURRICULUM:** Clinical Chemistry: Laboratory Automation, Principles of biochemical analysis and interferences, Interpretation of biochemical results, Immunoassay principles and methods, Serum Protein Electrophoretic techniques including immunofixation, Nephelometry, Electrolytes, Chromatographic techniques including introduction to LCMS and New-born screening tests.
- B) Clinical hematology and Immunohematology: Complete blood counting techniques including interpretation of cell counter data. Coagulation assays, Hypercoagulable state evaluation, Hemoglobin Electrophoresis, Red cell abnormalities including membrane abnormalities, Blood grouping, Red cell antibody tests, bone marrow aspiration and biopsy studies, Flow-cytometry including immunophenotyping, HLA typing and tissue cross matching.
- C) Clinical pathology: Manual and automated methods of urine analysis, stool examination, semen analysis. Examination of body fluids.
- D) Microbiology and serology: Basic microbiology stains and their interpretation, safety and infection management, principles of serological tests, immunofluorescence assays, Manual infectious serology. (Microbiological culture tests are not included)
- E) Cytology: Basics of cyto-preparatory techniques, Performance of FNAC and PAP smear procedures, interpretation of smears and cell blocks.
- F) Quality control and quality assurance: Understanding of accreditation requirements, development of quality management system including system processes, designing and QC program, monitoring QC goals including CV%,

- Bias, laboratory error, Sigma metrics, Internal audit principles, Root-cause analysis, corrective and preventive actions.
- G) General laboratory management: Setting up a lab, patient / client management, laboratory informatics, data analytics, principles of phlebotomy.
 - H) Very brief overview of advanced techniques in histopathology, molecular diagnostics and cytogenetics.

Majority of theoretical knowledge will be through self-learning, though part of it would also be through interaction with laboratory staff. Practical knowledge will be through observation and one-to one interaction. Additional knowledge will be through the institution's planned teaching programs.

SELECTION OF CANDIDATES:

- a) Through direct interview following screening of the application and bio-data of the applicant in case there are three or less number of applicants.
- b) Written exam (objective type) followed by interview of qualified candidates in case there are more than three applicants

Date: Course begins on first working day of the month following selection or as mutually agreed upon.

Venue:

Neuberg Anand Academy of Laboratory Medicine
Anand Tower, 54, Bowring hospital road,
Shivajinagar, Bangalore -560001

For further information, contact: **Dr. N Jayaram (Course Director)**

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