**Routine Laboratory Techniques-II) BVOMLT-206**

Unit I

Routine Hematological Tests

Determination of hemoglobin concentration ,determination of hematocrit , enumeration of formed elements ,calculations of red blood cell indices - MCV, MCH, and MCHC, Automated systems in hematology ,study of blood smear , Reticulocyte count, Erythrocyte sedimentation rate ( ESR ) Eosinophil count , platelet count

Unit II

Urine Examination

Urine analysis, routine examination of urine, rapid chemical tests of Urine

Clinical significance, specimen collection, laboratory investigation, Clinical significance, specimen collection, laboratory investigation

Unit III

Stool Examination

Gross examination, physical examination of stool, determination of pH, chemical examination of feces, microscopic examination of stool specimen

Clinical significance, specimen collection, laboratory investigation, Clinical significance, specimen collection, laboratory investigation

Unit IV

Semen Examination

Semen analysis, routine examination of semen, quantitative determination of semen fructose, interpretative semen analysis, examination for the presence of sperms

Sputum Examination

Indication, collection, container, transport, preservation for different types of sputum analysis.

Physical examination and its significance, chemical examination and its significance.

Microscopic examination and its significance.