## II. CLINICAL LABORATORY SEVICES

### A. Hematology and Immunohematology

| TEST | SPECIMEN REQUIRED | AMOUNT REQUIRED | SPECIAL INSTRUCTIONS | TEST FREQUENCY | NORMAL VALUES |
|---|---|---|---|---|---|
| Hematocrit<br>(Maty., F.P., MHC) | Lavender top vacutainer tube (EDTA) | > 4 ml | Gently invert tube 8 to 10 times slowly when drawn to mix anticoagulant.<br><br>DO NOT CENTRIFUGE. | Daily | Men: 41 – 53 %<br>Women: 36 – 47 %<br>Pregnancy: 33 – 47 % |
| CBC | Lavender top vacutainer tube (EDTA) | > 4 ml. | Gently invert tube 8 to 10 times slowly when drawn to mix anticoagulant. Specimen must not be more than 24 hours old.<br><br>DO NOT CENTRIFUGE. | Daily | FEMALE<br>WBC ($x10^3mm^3$) 7.1+/-2.9<br>RBC ($x10^6mm^3$) 4.8+/-0.6<br>Hb (g/dl) 14.0+/-2<br>Hct. (%) 42+/-5<br>MCV ($u^3$) 91+/-10<br>MCH (pg) 31 (27-34)<br>MCHC (%) 34 (31.5-36)<br>PLT ($x10^3/mm^3$) 140-440 |
| Immunohematology<br>ABO, Rh, Antibody screen and I.D. | Large red top vacutainer tube | > 5 ml. | Include patient history such as blood transfusions, abortions, miscarriages, amniocentesis, if patient received Rhogam, etc.<br>Place upright in test tube rack for 60 minutes to clot at room temperature.<br>DO NOT MIX. | Daily | N/A |
| Glucose | PST Green | > 4 ml. | Gently invert tube 8 to 10 times slowly when drawn to mix anticoagulant.<br>Allow 30 minutes for clotting.<br>Centrifuge within 2 hours of collection. | Daily | Normal Adult Plasma:<br>Fasting: 74-140 mg/dL<br>2 hr. Postprandial: <140 mg/dl |

| TEST | SPECIMEN REQUIRED | AMOUNT REQUIRED | SPECIAL INSTRUCTIONS | TEST FREQUENCY | NORMAL VALUES |
|---|---|---|---|---|---|
| Cholesterol | PST Green | > 4 ml | A 12 hour fasting specimen is preferred.<br>Gently invert tube 8 to 10 times slowly when drawn to mix anticoagulant.<br>Allow 30 minutes for clotting.<br>Centrifuge within 2 hours of collection. | Daily | *Risk Classification* *Total Cholesterol*<br>Desirable <200<br>Borderline High 200-239<br>High >240 |
| Triglyceride | PST Green | > 4 ml | A 12 hour fasting specimen is preferred.<br>Gently invert tube 8 to 10 times slowly when drawn to mix anticoagulant.<br>Allow 30 minutes for clotting.<br>Centrifuge within 2 hours of collection. | Daily | *Normal Values*<br>Male: 40 - 160 mg/dL<br>Female: 35 - 135 mg/dL |

B. TB Clinical Chemistry

| TEST | SPECIMEN REQUIRED | AMOUNT REQUIRED | SPECIAL INSTRUCTIONS | TEST FREQUENCY | NORMAL VALUES |
|---|---|---|---|---|---|
| Alanine Aminotransferase (ALT) (SGPT) | PST Green | > 4 mL | Specimen must be < 48 hours old. If not possible, freeze the decanted plasma.<br>Gently invert tube 8 to 10 times slowly when drawn to mix anticoagulant.<br>Allow 30 minutes for clotting.<br>Centrifuge within 2 hours of collection. | Daily | Newborn/Infant: 13 – 45 U/L<br>Adult : 30 – 65 U/L |

Continuation of TB Clinical Chemistry

| TEST | SPECIMEN REQUIRED | AMOUNT REQUIRED | SPECIAL INSTRUCTIONS | TEST FREQUENCY | NORMAL VALUES |
|---|---|---|---|---|---|
| Aspartate Aminotransferase (AST) (SGOT) | PST Green | > 4 mL | Specimen must be < 48 hours old. If not possible, freeze the decanted plasma.<br>Gently invert tube 8 to 10 times slowly when drawn to mix anticoagulant.<br>Allow 30 minutes for clotting.<br>Centrifuge within 2 hours of collection. | Daily | Newborn: 40 – 120 U/L<br>Infant: 25 – 95 U/L<br>Adult: 15 – 37 U/L |
| Total Bilirubin | PST Green | > 4 mL | Specimen must be < 48 hours old. If not possible, freeze the decanted plasma.<br>Gently invert tube 8 to 10 times slowly when drawn to mix anticoagulant.<br>Allow 30 minutes for clotting.<br>Centrifuge within 2 hours of collection.<br>Specimen must be protected from light at all times. Place upright in a rack inside a brown paper bag that is closed. | Daily | Adult: 0.2 – 1.2 mg/dL |
| Blood Urea Nitrogen (BUN) | PST Green | > 4 mL | Specimen must be < 48 hours old. If not possible, freeze the decanted plasma.<br>Gently invert tube 8 to 10 times slowly when drawn to mix anticoagulant.<br>Allow 30 minutes for clotting.<br>Centrifuge within 2 hours of collection. | Daily | Newborn: 4 – 12 mg/dL<br>Infant/child: 5 – 18 mg/dL<br>Adult: 7 – 18 mg/dL<br>> 60 yrs: 8 – 21 mg/dL |

Continuation of TB Clinical Chemistry

| TEST | SPECIMEN REQUIRED | AMOUNT REQUIRED | SPECIAL INSTRUCTIONS | TEST FREQUENCY | NORMAL VALUES |
|---|---|---|---|---|---|
| Creatinine | PST Green | > 4mL | Specimen must be < 48 hours old. If not possible, freeze the decanted plasma.<br>Gently invert tube 8 to 10 times slowly when drawn to mix anticoagulant.<br>Allow 30 minutes for clotting.<br>Centrifuge within 2 hours of collection. | Daily | Infant: 0.2 – 0.4 mg/dL<br>Child: 0.3 – 0.7 mg/dL<br>Adolescent : 0.5 – 1.0 mg/dL<br>Adult, Male: 0.6 – 1.3 mg/dL<br>Female : 0.6 – 1.1 mg/dL |
| Uric Acid | PST Green | > 4 mL | Specimen must be < 48 hours old. If not possible, freeze the decanted plasma.<br>Gently invert tube 8 to 10 times slowly when drawn to mix anticoagulant.<br>Allow 30 minutes for clotting.<br>Centrifuge within 2 hours of collection. | Daily | Child: 2.0 – 5.5 mg/dL<br>Adult, Male: 3.5 – 7.2 mg/dL<br>Female: 2.6 – 6.0 mg/dL |

## C. Special Hematology

| TEST | SPECIMEN REQUIRED | AMOUNT REQUIRED | SPECIAL INSTRUCTIONS | TEST FREQUENCY | NORMAL VALUES |
|---|---|---|---|---|---|
| Hemoglobin Electrophoresis | Lavender top vacutainer tube (EDTA) | > 4 ml. | Gently invert tube 8 to 10 times slowly when drawn to mix anticoagulant.<br>DO NOT CENTRIFUGE. | Daily | Hb AA |