MANUAL OF LABORATORY INVESTIGATIONS

Vardhman Mahavir Medical College

and

Safdarjang Hospital

Foreword

It has been very frequently observed that several patients/ patient relatives are wandering in OPD and wards for want of information regarding where they should submit the samples for various investigations viz. biochemistry, pathology, microbiology, lab medicine, hematology lab and Apex Regional STD lab. In addition, they do not know what are the timings of various sample collection counters, various report dispatch counters and their timings. This causes lot of inconvenience to public as the same information is not even available with their treating doctors. Due to this, the Public Grievance Redressal Cell (PGRC) receives lot of complainants everyday.

The PGRC, SJH under the chairmanship of Dr. R.K. Anand has taken initiative of compiling this comprehensive booklet to serve as a ready reference for the clinicians in the hospital so that they can appropriately guide the patients and their relatives regarding the sample collection counters and report dispatch counters for the various laboratory investigations.

The faculty and the residents of all clinical departments in the hospital are expected to consult this booklet and provide the requisite information to the patients while advising any laboratory tests.

I hope the booklet will serve its intended purpose well!

Dr Sunil Gupta Medical Superintendent, Safdarjang Hospital

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DEPARTMENT OF PATHOLOGY

1. <u>List of investigations –</u>

TESTS DONE IN HISTOPATHOLOGY:

- 1. Routine H& E staining,
- 2. Frozen section and scrape Cytology,
- 3. Special Stains,
- 4. Immunohistochemistry and
- 5. Immunofluorescence.

TESTS DONE IN CYTOPATHOLOGY

- 1. FNAC,
- 2. Special Stains,
- 3. Immunocytochemistry,
- 4. PAP and
- 5. Liquid based cytology
- 6. Cytological examination of body fluids like urine, pleural, CSF, synovial, peritoneal and pericardial fluid for malignant cells
- 7. Sputum, BAL fluid, bronchial brush, TBNA and EBUS examination for malignant cells.

TEST DONE IN CLINICAL PATHOLOGY:-

- 1. IgM,
- 2. IgG,
- 3. IgA,
- 4. IgE
- 5. ANA
- 6. DsDNA
- 7. Anti -cardiodipin antibody-IgG
- 8. Anti -cardiolipin antibody -lgM
- 9. Complement assay
- 10. C3
- 11. C4

Cancer Markers

- 12. AFP, hCG
- 13. CEA
- 14. PSA
- 15. CA15.3
- 16. CA19.9
- 17. CA-125

18. Serum electrophoresis for M Band

Diabetic profile

- 19. Serum Insulin
- 20. Glycosylated Hemoglobin
- 21. Urine sugar and urinary ketones.

Fertility Panel

- 22. Serum FSH
- 23. Serum LH
- 24. Serum Prolactin
- 25. Serum Estradiol
- 26. Serum Progesterone
- 27. Serum T3 ,T4 ,TSH (only for infertility patients)
- 28. DHEAS
- 29. Anti sperm antibody
- 30. Testosterone

Thyroid Profile

- 31. Serum T3, T4, TSH
- 32. TPO
- 33. Thyroglobulin Ab

Haematological investigations

- 34. Haemoglobin estimation
- 35. Total leukocyte count
- 36. Total Erythrocyte count
- 37. Platelet count
- 38. MCV, MCH, PCV, MCHC
- 39. Differential leukocyte count
- 40. ESR
- 41. Peripheral smear reporting for haemoparasite
- 42. Peripheral smear reporting for haematological abnormalities
- 43. Reticulocyte count
- 44. Absolute eosinophil count
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Urine analysis

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- 50 Urine for microalbumin
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- 52 Urine for ketone bodies
- 53 Urine for bile salts, pigments & urobilinogen
- 54 Urine for blood
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- 56 Urine specific gravity
- 57 Urine for leucocytes/Nitrates
- 58 Microscopy examination of urine sediments
- 59 Bence Jones protein (Urine)

Miscellaneous

- 60 Serum Cortisol estimation
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- 63 Serum Ferritin
- 64 ANA and dsDNA

SPECIAL HAEMATOLOGY

- 1. Flow Cytometry
- 2. Cytochemistry for leukemia
- 3. Bonemarrow aspiration and bone marrow biopsy examination
- 4. Nephelometry
- 5. Coagulation profile
- **6.** Platelet aggregometry

MOLECULAR LAB

1. HLA Typing studies

TESTS DONE IN CENTRAL COLLECTION CENTRE

- 1. Hemoglobin estimation
- 2. Total leukocyte count
- 3. Total Erythrocyte count
- 4. Platelet count
- 5. MCV, MCH, PCV, MCHC
- 6. Differential leukocyte count
- 7. ESR

- 8. Peripheral smear reporting for haemoparasite
- 9. Peripheral smear reporting for haematological abnormalities
- 10. Reticulocyte count
- 11. Absolute eosinophil count
- 12. LE cell Phenomenon
- 13. Bleeding time
- 14. Clotting time

Urine analysis

- 15. Urine albumin and 24 hours estimation
- 16. Urine for microalbumin
- 17. Urine glucose/sugar
- 18. Urine for ketone bodies
- 19. Urine for bile salts, pigments & urobilinogen
- 20. Urine for blood
- 21. Urine pH
- 22. Urine specific gravity
- 23. Urine for leucocytes/Nitrates
- 24. Microscopy examination of urine sediments

Stool Examination

- 25. Stool for occult blood
- 26. Stool for ova/cyst or any other microscopically detected parasites
- 27. Sputum examination for malignant cells

TESTS DONE IN GYNAE LAB

- 1. Hemoglobin estimation
- 2. Total leukocyte count
- 3. Total Erythrocyte count
- 4. Platelet count
- 5. MCV, MCH, PCV, MCHC
- 6. Differential leukocyte count
- 7. Peripheral smear reporting for haemoparasite
- 8. Peripheral smear reporting for haematological abnormalities
- 9. Urine examination
- 10. Thyroid profile
- 11. Blood grouping
- 12. Urine for pregnancy test

TESTS DONE IN BURNS & PLASTIC LAB

- 1. Hemoglobin estimation
- 2. Total leukocyte count
- 3. Total Erythrocyte count
- 4. Platelet count
- 5. MCV, MCH, PCV, MCHC
- 6. Differential leukocyte count
- 7. ESR
- 8. Peripheral smear reporting for haemoparasite
- 9. Peripheral smear reporting for haematological abnormalities
- 10. Serum electrolytes
- 11. Blood urea

TESTS CARRIED OUT IN PATHOLOGY LABORATORY, NEW EMERGENCY BLOCK

- 1. CBC
 - i. Hb
 - ii. TLC/DLC
 - iii. Platelet Count
 - iv. RBC Count
 - v. MCV
 - vi. MCH
 - vii. MCHC
 - viii. RDW
 - ix. Peripheral Smear for hemoparasite
- 2. Absolute Eosinophil Count
- 3. Coagulation Profile
 - i. PT
 - ii. APTT
 - iii. INR
- 4. Urine Examination Routine & Microscopy
- a. Routine
 - i. Protein
 - ii. Sugar
 - iii. Ketones
 - iv. S. Gravity
 - v. pH
- b. Microscopy
 - i. Pus Cells
 - ii. Epithelial Cells
 - iii. Casts
 - iv. Crystals
 - v. Others
- 5. Body Fluids for Cell Count

6. CSF for Cell Count

(Fluid Cytology for malignant cell is done in Cytology Lab. R.No. 410, VMMC College Building on all working days).

2. List of sample collection counters/rooms and sample collection timings

a) Central Collection Centre:

Central **Collection** Centre is situated at OPD Phase –III (Ground Floor), Room No. 19 where the samples from **OPD** and wards are collected for Departments of Clinical Pathology /Laboratory Medicine, Biochemistry and Microbiology.

All routine haematology/ urine/ stoolsamples for pathological tests are processed in this lab. Reports are dispatched to the various OPD and wards the same evening.

Registration & Sample collection Time for OPD

Monday to Friday: 9:00 A.M. to 11:30 A.M. Saturdays : 9:00 A.M. to 10:00 A.M.

Sample collection for ward

Monday to Friday: 9:00 A.M. to 11:30 A.M. Saturdays : 9:00 A.M. to 10:30 A.M.

b) Gynae Lab:

Gynae Lab is situated at First floor, Gynae OPD where the samples from **ANCOPD and wards** are collected for Department of Obst. & Gynae.

Sample collection Time for OPD

Monday to Friday: 9:00 A.M. to 11:30 A.M. Saturdays : 9:00 A.M. to 10:00 A.M.

Sample collection for ward

Monday to Friday: 9:00 A.M. to 11:30 A.M. Saturdays : 9:00 A.M. to 10:30 A.M.

c) Burn and Plastic Lab:

Burns & Plastic Lab is situated at Ground floor, Burns & Plastic OPD where the samples from **OPD and wards** are collected for Department of Burns & Plastic.

It caters to all indoor and outdoor cases of Burn and Plastic Department

Sample collection Time for OPD

Monday to Friday: 9:00 A.M. to 11:30 A.M.

Saturdays : 9:00 A.M. to 10:00 A.M.

Sample collection for ward

Monday to Friday: 9:00 A.M. to 11:30 A.M. Saturdays : 9:00 A.M. to 10:30 A.M.

d) Emergency lab:

Emergency lab is located at First floor, New Emergency building (NEB). Samples from casualty (24 hrs) and all indoor patients after 4:00 P.M.

Operational 24 hours all days, including Sundays and holidays, providing emergency services.

e) Super speciality block lab (SSB) -

Super speciality block lab is located at Third floor, Super speciality block building (SSB).

Sample collection Time for OPD

Monday to Friday: 9:00 A.M. to 11:30 A.M. Saturdays : 9:00 A.M. to 10:00 A.M.

Sample collection for ward

Monday to Friday: 9:00 A.M. to 11:30 A.M. Saturdays : 9:00 A.M. to 10:30 A.M.

f) Histopathology:

Histopathology lab is situated at 4th floor, VMMC College building. All surgical specimens / tissue biopsies from the various departments of Safdarjung Hospital are received, processed and examined microscopically to reach a definite diagnosis.

Sample Receiving Time: 10:00 A.M. – 12:00 Noon (Monday to Friday)

2:00 P.M. - 3:00 P.M. (Monday to Friday)

10:00 A.M. - 11:30 A.M. (Saturday)

g) Cytopathology:

Fine Needle Aspiration Cytology (FNAC) done in Room No. 557, 5th Floor, OPD Building

Timings: Registration: 9:30 A.M. – 11:00 A.M. (Monday to Friday)

9:30 A.M. - 10:30 A.M. (Saturday)

All the patients registered undergo FNAC procedure on the same day.

Pap's Smears & fluid Cytology: Room No.410, in Fourth Floor, Deptt. of Pathology, Vardhman Mahavir Medical College building.

Receiving time: 9:30 A.M. – 12:00 Noon daily.

h) Main Lab:

Main lab is situated in 2nd Floor, B wing, Old casualty building

Registration & Sample Collection time:

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Mon to Fri.(OPD) - 09:00 A.M. to 11:30 A.M.

Mon to Fri.(Ward) - 09:00 A.M. to 12:00 Noon

On Sat. (OPD) - 09:00 A.M. to 10:30 A.M.

On Sat. (Ward) - 09:00 A.M. to 11:00 A.M.
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All tests done as per the list of tests done in clinical pathology.

i) Special hematology:

Special hematology lab is situated in Room No. 212, 2^{nd} Floor, B wing, Old casualty building Sample Collection time: 9:00 A.M. – 12:00 Noon

j) Molecular Lab:

Molecular lab is situated in Room No. 216, 2nd Floor, B wing, Old casualty building HLA typing of all the cases referred from renal transplant unit and others.

3. Report dispatch counters:-

a) Central Collection Centre [OPD Blood Sample Collection for multiple test]:

Report dispatch – All ward reports are dispatched to the respective wards on the same day.

All OPD reports are dispatched to the respective OPDs, early morning next day.

b) Gynae Lab:

Report dispatch-

All ward reports are dispatched to the respective wards on the same day.

All OPD reports are distributed at the report distribution counter in Gynae OPD under Deptt. of Obst. & Gynae

Some OPD reports like Hb and urine are given at the same time to the patient.

c) Burn and Plastic Lab:

Report dispatch-

All ward reports are dispatched to the respective wards on the same day.

All OPD reports are distributed at the report distribution counter in Burns & Plastic OPD under Deptt. of Burns & Plastic surgery.

d) Emergency lab:

Reports dispatched to the respective units by MTW worker.

e) Histopathology:

Report dispatch – Room No. 413, 4th Floor, Vardhman Mahavir Medical College building.

Time – 9:00 A.M. to 12:00 Noon (Monday to Saturday)

f) Cytopathology:

FNAC report dispatch – Room No. 557, 5th Floor, OPD Building

Time - 9:30 A.M. to 12:00 Noon

<u>Pap smear and LBC report dispatch</u> – All reports are dispatched to be distributed at the report distribution counter in Gyane OPD under Deptt. of Obst. & Gynae.

<u>Fluid cytology report</u> – Room No. 410, 4th floor, Vardhman Mahavir Medical College building

Time - 9:00 A.M. to 12:00 Noon

g) Main Lab:

Report dispatch -

All ward reports are dispatched to the respective wards.

All OPD reports are dispatched to be distributed at the report distribution counter No. 3 in Room No. 211, IInd floor, B-wing, Old casualty building.

Time:

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Mon to Fri.(OPD) - 09:00 A.M. to 11:30 A.M.

Mon to Fri.(Ward) - 09:00 A.M. to 12:00 Noon

On Sat. (OPD) - 09:00 A.M. to 10:30 A.M.

On Sat. (Ward) - 09:00 A.M. to 11:00 A.M.
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h) Special hematology:

Report dispatch –

All reports are to be collected from Room No. 212, IInd floor, B-wing, Old casualty building.

Time - 9:00 AM to 12:00 Noon

i) Molecular Lab:

Report dispatch -

All reports are to be collected from Room No. 216, IInd floor, B-wing, Old casualty building.

Time - 9:00 A.M. to 12:00 Noon

DEPARTMENT OF BIOCHEMISTRY

1) LIST OF INVESTIGATIONS:

CLINICAL BIOCHEMISTRY UNIT + BIOCHEMISTRY LAB, NEW EMERGENCY BLOCK

A) Clinical Biochemistry Unit:

1. Blood Sugar

- Fasting
- PP
- Random
- OGTT

2. KFT

- Urea
- Creatinine

3. Serum Electrolyte

- Na+
- K+

4. LFT

- T. Bil
- D. Bil
- I. Bil
- AST
- ALT
- ALP

5. S. Protein

- Albumin
- Globulin

6. Lipid Profile

- Triglycerides
- Total Cholesterol
- LDL
- HDL
- TC: HDL Ratio

7. Cardiac

- Total CK
- CK-MB
- LDH
- 8. Sr. Ca+
- **9.** Sr. Phosphorous
- 10. Sr. Amylase
- 11. Sr. Uric Acid
- 12. Urinary Creatinine
- 13. Creatinine Clearance
- 14. Asitic/Plural Fluid Protein
- 15. 24hr. Urinary Calcium

B) Biochemistry Lab, New Emergency Block:

- 1. Blood Sugar
 - Fasting
 - Random
- 2. KFT
 - Urea
 - Creatinine
- 3. Serum Electrolytes
 - Sodium
 - Pottassium
- 4. LFT
 - Total Billirubin
 - Direct Billirubin
 - AST
 - ALT
 - ALP
- 5. Cardiac Enzymes
 - Total CK
 - CK-MB
- 6. CSF
 - CSF-Sugar
 - CSF-Protein
- 7. Amylase
- 8. Asitic/Pleural Fluid
 - -Sugar
 - -Protein

2) SAMPLE COLLECTION COUNTERS:

S. No.	Sample Collection Counters	Timing
a)	Central Collection, Room No. 19, OPD Block	9am To 11:30am
b)	Biochemistry Collection at Biochemistry Department, Old Emergency Block, 3 rd Floor	9am To 11:30am
c)	For Blood Sugar & Lipid Profile, Room No. 415, Biochemistry Department, Old Emergency Block, 3 rd Floor	8:30am To 11:30am
d)	Room No. 312, 3 rd Floor, Super Specialty Building	9am To 11:30am
e)	Sample Collection Counter, Waiting Hall, 1 st Floor, New Emergency Block	24 Hrs.

3) **DISPATCH COUNTERS:** Reports are dispatched in:-

S. No.	Dispatch Counters	Timing
a)	Reporting room of all OPDs in OPD Block	9am To 11:30am
b)	All Wards, ICU in all Old Emergency Block, NEB, SSB, H-Block, Surgical, Ortho, Gynae wards.	4pm To 5pm

DEPARTMENT OF MICROBIOLOGY

1. LIST OF INVESTIGATIONS

Bacteriology Test

- 1. Urine Section
 - a) Culture using conventional method
 - b) Antibiotic susceptibility of isolated pathogens
- 2. Sterile Fluids including CSF Section
 - a) Direct gram stain of all sample
 - b) Culture using conventional method
 - c) Antibiotic susceptibility of isolated pathogens
 - d) Latex agglutination for selected pathogens (*Streptococcus pneumonia, Neisseria meningitides, Heamphilus influenza,* Group B *Streptococcus*) (on request)
 - 3. Pus and Miscellaneous Section
 - a) Direct gram stain of sputum samples, endotracheal aspirate or any other sample that is requested
 - b) Culture of all samples (pus swabs, pus aspirate, throat swab, sputum, endotracheal aspirate, broncho-alveolar lavage, high vaginal swabs, semen, placental membrane, corneal scrapping, knee aspirate) by conventional method
 - c) Albert's stain for throat swabs
 - d) Antibiotic susceptibility of isolated pathogens
 - 4. Blood Section
 - a) Culture using conventional and automated methods
 - b) Antibiotic susceptibility of isolated pathogens
 - c) Antibiotic MIC by automated (on request)

Serology

- 1. WIDAL
- 2. Typhi Dot
- 3. CRP test
- 4. Serum Procalcitonin (PCT) (Semiquantitative)
- 5. ASLO test
- 6. RA Factor test
- 7. Anti CCP Antibody test
- 8. Anti Leptospirosis Antibody test (Rapid and ELISA)
- 9. Anti Scrub Typhus Antibody test (Rapid and ELISA)

Parasitology

- 1. Stool Routine Microscopy for ova and cyst
- 2. Stool for vibrio (Hanging Drop)
- 3. Stool culture and susceptibility
- 4. Stool for special parasites
- 5. Blood for microfilaria
- 6. Liver Abscess aspirate for Entamoeba histolytica/Hydatid cysts
- 7. Hydatid serology
- 8. Rapid Malaria Antigen test
- 9. Peripheral smear for malarial parasite
- 10. Kala Azar (rK39 Test)
- 11. Anti-Neurocycticercosis antibody Test
- 12. Anti- Entamoeba histolytica antibody Test
- 13. Filarial antigen test

Anaerobic

- 1. Culture
- 2. Clostridium difficile toxin detection

Tuberculosis

- 1. ZN Stain
- 2. Culture (MGIT)
- 3. Molecular tests (on request)

Mycology

- 1. KOH mount
- 2. India ink

- 3. Mycology stains grams and giemsa
- 4. Culture
- 5. Antifungal susceptibility test
- 6. Galactomannan
- 7. Pan Fungal PCR

Virology other than Hepatitis

- 1. TORCH panel Test
- 2. Dengue NS1
- 3. Anti Dengue IgM
- 4. Anti Chikungunya IgM

Influenza A H1N1 (Swine Flu)

- 1. Qualitative Real Time PCR
- 2. Respiratory Viral pathogens (on request)

Hepatitis

- 1. Anti HBs Antibody titres for Health care workers
- 2. HBsAg ELISA
- 3. HBsAg Card Test
- 4. Anti HBcore Ab IgM
- 5. HBeAg ELISA
- 6. Anti HCV ELISA
- 7. HCV DOT Card Test
- 8. Anti HAV ELISA
- 9. Anti HEV ELISA
- 10. Anti HBS Ag ELISA (Semiquantitative)

STD

- 1. HIV 1 & 2 Antibody Test (Immuno-chromatography, Lateral Flow)
- 2. HIV 1 & 2 Antibody Test (Immuno-concentration, Flow through)
- 3. HIV 1 & 2 Antibody Test (Enzyme Immuno Assay)
- 4. HIV 1 & 2 Antibody Test (ELISA)
- 5. CD₄ Cell Count
- 6. VDRL (Qualitative and Quantitative)
- 7. RPR (Qualitative and Quantitative)
- 8. TPHA
- 9. FTA-Abs
- 10. TP IgG ELISA
- 11. Gram Stain for Neisseria gonorrhoea, H ducreyi, Candida, Bacterial vaginosis
- 12. Giemsa stain for MNGC, Donovan Bodies

- 13. Dark Ground examination for Treponema pallidum
- 14. Wet mount for Trichomonas vaginalis, KOH mont for Candida
- 15. Aerobic Culture for Neisseria gonorrhoea, Candida, Trichomonas vaginalis
- 16. Antimicrobial susceptibility testing for Neisseria gonorrhoea
- 17. Antimicrobial susceptibility testing for fluconazole

NEB

- 1. Urine culture
- 2. Blood culture by Automated blood culture system BacTAlert 3D system
- 3. Pus culture Aspirate and swab
- 4. ET culture
- 5. Tissue culture
- 6. Culture of sterile body fluids pleural fluid, peritoneal fluid, pericardial fluid, CSF
- 7. Throat swab culture
- 8. Gram stain
- 9. Albert's stain
- 10. India Ink preparation
- 11. Malarial antigen rapid card test
- 12. CRP latex agglutination
- 13. ASO latex agglutination
- 14. RA factor latex agglutination
- 15. Susceptibility testing disk diffusion and automated ID and AST system (Vitek 2)
- 16. Urine microscopy uncentrifuged specimen
- 17. HBsAg Immunochromatographic test
- 18. Anti-HCV antibodies Rapid test (ICT/Flow through)

2. LIST OF SAMPLE COLLECTION COUNTERS, THE SAMPLES COLLECTED THERE AND SAMPLE COLLECTION TIMING

- 1. Routine samples Room No 9, OPD Building, Ground Floor (Monday to Friday: 9AM-11:30AM, Saturday 9AM to 10:30AM)
- 2. Ward samples collection counter, near office of Department of Microbiology, 5th Floor, College Building

Routine Samples up to 12:00PM (Monday to Friday) & 10:30AM (Saturday) Emergency Samples up to 3:30PM (Monday to Friday) & 12:30AM(Saturday)

3. All other samples beyond routine sample timings are accepted in NEB, Room No.107, 1st Floor, NEB Building.

Note: Urine samples for culture & sensitivity will not be accepted after 12:30 PM in Main Laboratory and after 4.00 PM in NEB

3. REPORT DISPATCH COUNTERS

All the reports are dispatched to the respective OPDs and departments by laboratory attendants.

Important/Critical reports are communicated on the telephone

Name of the test	Turn around time	
BACTERIOLOGY		
Bacteriological Culture	24-48hrs (Some cases upto 72hrs)	
Gram's Stain, Albert's Stain, Wet mount, Stool	Available same day. Reports dispatched next	
hanging drop	day	
SEROLOGY		
WIDAL	24hrs	
Typhi Dot	Available same day. Reports dispatched next day	
CRP test	Available same day. Reports dispatched next day	
Serum Procalcitonin (PCT) (Semiquantitative)	Tested in batches (once in 15 days)	
ASLO test	Available same day. Reports dispatched next day	
RA Factor test	Available same day. Reports dispatched next day	
Anti CCP Antibody test	Tested in batches (once in 15 days)	
Anti Leptospirosis Antibody test (Rapid and	Rapid- Available same day. Reports dispatched	
ELISA)	next day	
	ELISA-Tested in batches	
Anti Scrub Typhus Antibody test (Rapid and	Rapid- Available same day. Reports dispatched	
ELISA)	next day	
	ELISA-Tested in batches	
DA DA CITOLO CV		
PARASITOLOGY Charles Booking Missesses for any and another	Available come dev. Devente dispetable durant	
Stool Routine Microscopy for ova and cyst	Available same day. Reports dispatched next day	
Stool for vibrio (Hanging Drop)	Available same day. Reports dispatched next day	
Stool culture and susceptibility	24-48hrs	
Stool for special parasites	Available same day. Reports dispatched next day	
Blood for microfilaria	Available same day. Reports dispatched next day	
Liver Abscess aspirate for Entamoeba	Available same day. Reports dispatched next	
histolytica/Hydatid cysts	day	
Hydatid serology	Tested in batches (once in 15days)	
Rapid Malaria Antigen test	Available same day. Reports dispatched next day	
Peripheral smear for malarial parasite	Reports dispatched next day	

Kala Azar (rK39 Test)	Tested in batches (once in 15days)	
Anti-Neurocycticercosis antibody Test	Tested in batches (once in 15days)	
Anti- Entamoeba histolytica antibody Test	Tested in batches (once in 10days)	
Filarial antigen test	Tested in batches (once in 15days)	
Clostridium difficile toxin detection	Reports dispatched next day	
MYCOBACTERIOLOGY		
Mycobacterium Culture	4-6 weeks	
ZN Stain	Dispatched the next day.	
Molecular Test for TB	Tested in batches (bi-monthly to monthly)	
MYCOLOGY		
Mycology Culture (Molds)	7-28 days	
Mycology Culture (Yeast)	1-3 days	
KOH Mounts, India Ink	Available same day. Reports dispatched next day	
Mycology Stains (Gram's and Giemsa)	Available same day. Reports dispatched next	
, 0,,	day	
Galactomannan	Tested in batches (weekly)	
Pan Fungal PCR	Tested in batches (bimonthly to monthly)	
VIROLOGY		
TORCH panel Test	Tested in batches (10 days)	
Dengue NS1	Seasonal – 24hrs, Non-seasonal (Tested in	
	batches – 3-4days)	
Anti Dengue IgM	Seasonal – 24hrs, Non-seasonal (Tested in	
	batches – 3-4days)	
Anti Chikungunya IgM	Seasonal – 24hrs, Non-seasonal (Tested in	
	batches – 3-4days)	
H1N1		
Qualitative Real Time PCR for H1N1	24-48hrs	
Respiratory Viral pathogens (on request)	Tested in batches (bi-monthly to monthly)	
inceptioner, the participation (correspond	record in outcomes (or interior) to interior,	
Hepatitis		
Anti HBs Antibody titres for Health care	4 days	
workers		
HBsAg ELISA	4 days	
HBsAg Card Test	Available same day	
Anti HBcore Ab IgM	4 days	
HBeAg ELISA	4 days	
Anti HCV ELISA	4 days	
HCV DOT Card Test	Available same day	
Anti HAV ELISA	7 days	
Anti HEV ELISA	7 days	
Anti HBS Ag ELISA (Semiquantitative)	4 days	
STD		

	I	
chromatography, Lateral Flow)		
HIV 1 & 2 Antibody Test (Immuno-	1 working day	
concentration, Flow through)		
HIV 1 & 2 Antibody Test (Enzyme Immuno	1 working day	
Assay)		
HIV 1 & 2 Antibody Test (ELISA)	7 working days	
CD ₄ Cell Count	1 working day	
VDRL (Qualitative and Quantitative)	1 working day	
RPR (Qualitative and Quantitative)	1 working day	
ТРНА	7 working days	
FTA-Abs	15 working days	
TP IgG ELISA	15 working days	
Gram Stain for Neisseria gonorrhoea, H ducreyi, Candida, Bacterial vaginosis	1 hour	
Giemsa stain for MNGC, Donovan Bodies	1 hour	
Dark Ground examination for Treponema pallidum	1 hour	
Wet mount for Trichomonas vaginalis, KOH mont for Candida	1 hour	
Aerobic Culture for Neisseria gonorrhoea, Candida, Trichomonas vaginalis	2 days, 7 days, 7 days	
Antimicrobial susceptibility testing for Neisseria gonorrhoea	4 days	
Antimicrobial susceptibility testing for	5 days	
fluconazole	S duys	
NEB		
Urine culture	24-48hrs	
Blood culture by Automated blood culture	24hrs-5days	
system - BacTAlert 3D system	241115-Dudy5	
Pus culture - Aspirate and swab	24-48hrs	
ET culture	24-48hrs	
Tissue culture	24-48hrs	
Culture of sterile body fluids - pleural fluid,	24-48nrs 24-48hrs	
peritoneal fluid, pericardial fluid, CSF	24-401113	
Throat swab culture	24-48hrs	
Gram stain	Available same day. Reports dispatched	
Grant stain	immediately	
Albert's stain	Available same day. Reports dispatched	
Albert 3 stair	immediately	
India Ink preparation	Available same day. Reports dispatched	
	immediately	
Malarial antigen - rapid card test	Available same day. Reports dispatched immediately	
CRP - latex agglutination	Available same day. Reports dispatched immediately	
ASO - latex agglutination	Available same day. Reports dispatched immediately	
RA factor - latex agglutination	Available same day. Reports dispatched	

Susceptibility testing - disk diffusion and automated ID and AST system (Vitek 2)	24-48hrs
Urine microscopy - uncentrifuged specimen	Available same day. Reports dispatched immediately
HBsAg - Immunochromatographic test	Available same day. Reports dispatched immediately
Anti-HCV antibodies - Rapid test (ICT/Flow through)	Available same day. Reports dispatched immediately

DEPARTMENT OF HEMATOLOGY

1) Name of Tests

- 1. Complete Hemogram (Hb,TLC, PCV,MCV,MCH,MCHC,RBC,PLATELET,RDW,PCT)
- 2. DLC on P.S
- **3.** ESR
- 4. RETICULOCYTE
- 5. Bone Marrow & Biopsy Staining
- 6. Cytochemistry:
- 7. PAS,Px,SudanBlack,Fe.stain
- 8. Serum Iron
- 9. TIBC
- 10.% Saturation, of Transferrin
- 11.Serum ferritin
- 12.s. Vit B12
- 13.S. folic Acid
- **14. Special Hematology Bio-Chemistry Test** (G6PD, Osmotic Fragility, Sucrose lysis Test for PNH, Sickling, Inclusion/ Heinz bodies, Plasama Hb, Urine for Hemocydrine, Urine BJ protein, Nitro-blue test (NBT), Autohemolysis 48hrs, Meth –Haemoglobin, LE Cell, Acid Elution Test)
- **15.**CSF Cytology
- 16. S. Protein Electrophroies
- **17.**Serum Immunofixation
- **18.**Immunohistochemistry
- 19. HPLC For Thalassemia
- 20. Platelet Aggregation (PFT)

Coagulation Profile Test

- **21.**BT, CT, PT, INR, TT, APPT,
- 22. MIXING Study
- 23. FDP/D- Dimer
- **24.** S. Fibrinogen assay

Special test coagulation

- **25.**Factor ,VIII Assay
- **26.**Factor, IX Assay
- 27. Factor XIII (Clot solubility)
- 28.Protein C

29.Protein S

30.A PL A

31. VwF Ag

OTHER TEST

- 32. RNA /DN A
- 33. FLOW CYTOMETRY

In the department of haematology, only referred patients are seen. The tests are performed in haematology Lab. located on first floor H-Block extension.

- **2)** Collections counter (Room No.1) and advised haematology investigations are done in haematology Laboratory. Timing of collection 9 AM To 11.30 AM.
- **3)** Patients are seen by clinical haematologist in room No. 5 and 5A located on ground floor of H-Block extension.
- **4)** Reports are attached to the haematology file and can be collected from Room No. 1 of haematology OPD on the direction of treating clinical haematologist. Timing (9 AM TO 4PM).

C.I.O. LABORATORY

INVESTIGATION	Sample Collection centre	Dispatch / report collection centre
HISTOPATH (Tissue & Bone Biopsy)	CIO LAB Timing (9 am TO 4pm)	CIO LAB Timing (9 am TO 4pm)
СҮТОРАТН	CIO LAB	CIO LAB
(FNAC)	Timing (9 am TO 4pm)	Timing (9 am TO 4pm)
HEMATOLOGY (CBC WITH ESR)	ROOM NO. 5G	Room no 10, Ground Floor)
Biochemistry& serology (only for orthopedic patient)	Timing (9am TO 11.30 am)	Timing (9 am TO 4pm)