

# Health Scan Laboratory

••• H S L

Scan today, Healthy
Tomarrow







#### COLLEGE OF ALLIED HEALTH PROFESSIONALS

# GOVERNMENT COLLEGE UNIVERSITY, FAISALABAD



# Faculty of Medical Sciences

### **Project Supervisor**

Dr. Imtiaz Mahmood Tahir

In charge / assistant Professor College of Allied Health Professionals Government College University, Faisalabad

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BS (Hons). Medical Laboratory Technology

Session: 2020-2024 | FALL | MORNING



# Group -II



- □ Semester: 8<sup>th</sup> Morning
- **Session:** 2020 to 2024
- ☐ Submitted To: Dr. Imtiaz Mahmood Tahir

#### **Group Members:**

- ➤ 8413 Muhammad Hashim
- ➤8415 Muhammad Haris Baig
- >8416 Samavia
- ➤ 8423 Maryam Kanwal
- ➤ 8424 Sehar
- ➤ 8441 Kanwal Shahzadi
- >8464 Hina Asim



# **Our Mission**

Scan Today, Healthy Tomorrow

The mission of Health Scan Laboratory is to provide accurate, reliable, and timely diagnostic testing services that enhance healthcare professionals. We are committed to utilizing advanced technology, adhering to the highest standards of quality and safety, and fostering a compassionate environment to ensure the well-being and satisfaction of our patients. Through continuous innovation, education, and collaboration, we aim to be a trusted leader in the medical laboratory industry.



# **About Us**

Address: East-Canal Road near Faisal Hospital, Faisalabad.



- 1. One side faces Canal Road.
- 2. Another side faces Faisal Hospital.
- 3. The third side faces the back street.

#### **Google map location**



#### **Near by Health Providers:**

- Faisal Hospital, Six Pharmacies, five clinics,
- Cardiologists, Orthopedic Surgeons, Pediatricians, Dermatologists, Gynecologists, Neurologists, ENT Specialist, Two Ophthalmologist, Gastroenterologist and Hepatologist, Urologist, Endocrinologist.







## **Our Services**

**Health Scan Laboratory** Scan today, Healthy tomorrow

#### **Our Services**

- Hematology
- Clinical Chemistry
- Special Chemistry
- Microbiology
- Molecular Diagnostics



0300-1234567 (www.healthscan.com





# **Rate List**

At Health Scan Laboratory, we understand the importance of providing high-quality diagnostic services at affordable rates. We made the rate list in **alphabetic order** according to our **expenses**, **Patients affordability** and **competitors** in

the market.

Sr.	Test Names	Sample	Report Time	Price
		A	_	
1.	A.N.A	3-5cc Clotted Blood Or Serum	Daily	1,000
2.	A.P.T.T.	Sodium Citrate Tube	Daily	500
3.	A/G Ratio	3-5cc Clotted Blood Or Serum	Daily	700
4.	Absolute Eosinophil Count	3cc EDTA Blood	Daily	350
5.	ACTH	3cc EDTA Blood	After 3 days	3,000
6.	AFB C/S		After 7 weeks	1,400
7.	Albumin	3-5cc Clotted Blood Or Serum	Daily	350
8.	Alkaline Phosphate	3-5cc Clotted Blood Or Serum	Daily	350
9.	Alpha Feto Protein	3-5cc Clotted Blood Or Serum	Daily	1,200
10.	Amylase (24 h Urine)	24 h Urine	Daily	1,000
11.	Amylase (Serum)	3-5cc Clotted Blood Or Serum	Daily	1,000
12.	Androgen Level	3-5cc Clotted Blood Or Serum	Daily	2,000
13.	Aldosterone Level	3-5cc Clotted Blood Or Serum	Next Day	3,000
14.	Anti CCP	3-5cc Clotted Blood Or Serum	Daily	4,000
15.	Anti HAV IgG	3-5cc Clotted Blood Or Serum	Daily	2,400
16.	Anti HAV IgM	3-5cc Clotted Blood Or Serum	Daily	2,500
17.	Anti HCV (Screening)	3-5cc Clotted Blood Or Serum	Daily	400
18.		3-5cc Clotted Blood Or Serum	Daily	450
19.		3-5cc Clotted Blood Or Serum	Daily	2500
		В		
20.	Beta HCG	3-5cc Clotted Blood Or Serum	Daily	1750
21.	Bicarbonate	3-5cc Clotted Blood Or Serum	Daily	600
22.	Bilirubin Conjugated	3-5cc Clotted Blood Or Serum	Daily	400
23.	Bilirubin Unconjugated	3-5cc Clotted Blood Or Serum	Daily	400
24.	Bilirubin Total	3-5cc Clotted Blood Or Serum	Daily	400
25.	Bleeding Time		Daily	300
26.	Blood C/E	3cc EDTA Blood	Daily	600
27.	Blood C/E For Dengue (HB, TLC,			
	Platelets Count)	3cc EDTA Blood	Daily	450
28.	Blood C/E with ESR	3cc EDTA Blood	Daily	700
29.	Blood Group	2cc EDTA Blood	Daily	200
30.	Blood For C/S	Blood Culture Vail		2200
31.	BUN	3-5cc Clotted Blood Or Serum	Daily	400
	1	С		

32.	C.P.K	3-5cc Clotted Blood Or Serum	Daily	600
33.	CA-125	3-5cc Clotted Blood Or Serum	Daily	3,500
34.	Calcium	3-5cc Clotted Blood Or Serum	Daily	350
35.	Cardiac Enzymes	3-5cc Clotted Blood Or Serum	Daily	1,000
36.	Cholesterol	3-5cc Clotted Blood Or Serum	Daily	350
37.	CK-MB	3-5cc Clotted Blood Or Serum	Daily	500
38.	Clotting Time		Daily	300
39.	Creatinine	3-5cc Clotted Blood Or Serum	Daily	300
10.	CRP	3-5cc Clotted Blood Or Serum	Daily	600
11.	CRP (High Sensitive)	3-5cc Clotted Blood Or Serum	Daily	1,200
12.	CSF For Analysis	CSF	Daily	1450
13.	CSF For C/S	CSF	After 3 Days	4000
		D		
14.	Dengue Ns1 Antigen	3-5cc Clotted Blood Or Serum	Daily	1450
15.	Dengue RNA by PCR	3-5cc Clotted Blood Or Serum	After 3 days	5,000
16.	Dengue IgG	3-5cc Clotted Blood Or Serum	Daily	1500
17.	Dengue IgM	3-5cc Clotted Blood Or Serum	Daily	1700
18.	DLC	3cc EDTA Blood	Daily	400
19.	D-Dimer	Sodium Citrate Tube	Daily	1900
		E	////	
50.	Ear swab for C/S	Swab	After 3 days	1700
51.	ESR	3cc EDTA Blood	Daily	200
52.	Electrolyte	3-5cc Clotted Blood Or Serum	Daily	1500
		F		
53.	FNAC		After 3 days	3,000
54.	Ferritin	3-5cc Clotted Blood Or Serum	Daily	1050
55.	Fluid for C/S	Fluid	Daily	1700
6.	Free T3	3-5cc Clotted Blood Or Serum	Daily	2200
57.	Free T4	3-5cc Clotted Blood Or Serum	Daily	2200
8.	Free Testosterone	3-5cc Clotted Blood Or Serum	Daily	2500
59.	FSH	3-5cc Clotted Blood Or Serum	Daily	1550
50.	Fungus C/S	All type Specimens	,	2500
-		G		
:1	G6 PD Test	3cc EDTA Blood	Daily	1,600
51. 52.	Gamma GT	3-5cc Clotted Blood Or Serum	Daily	700
53.	Gamma G1	3-5cc Clotted Blood Or Serum	Daily	800
	GCI	3-500 Ciottea Bioda Or Serum	Dally	000





# Laboratory floor plan based on WHO guidelines

• Our total area of the lab is 230 m²or 2475.70 sq ft with dimensions 49.76 ft x 49.76 ft.

**Reception Area** (10m<sup>2</sup>) or  $10\text{ft} \times 11\text{ft}$  (110 ft<sup>2</sup>)

□Biochemistry Section (40m²) or 20ft×22ft (440 ft²)

☐Microbiology Section (40m²) or 20ft×22ft (440 ft²)

□Hematology Section (30m²) or 16ft× 20ft (320 ft²)

□Molecular Biology Section (40m²) or 20ft×22ft (440 ft²)

□**Store Room** (10m²) or **10ft×11ft** (110 ft²)

□Corridors (1.5m wide) or 5ft

# Organum



Pathologists (2) Lab manager (1) Lab technologists Lab technician (4) (4)

# Staff Duty Roaster

Designation	Name	Timing
Phlebotomist	Aslam	8am to 3pm
Phlebotomist	Akram	3pm to 11pm
Receptionist	Ahmad	8am to 3pm
Receptionist	Nida	3pm to 11pm
Pathologist (Chemical Pathologist)	Hashim	8am to 3pm
Pathologist (Hematologist)	Hina Asim	3pm to 11pm
Lab Manager/ QC In charge	Kanwal	Full Time
Technicians	Hamza	8am to 3pm
Technologist	Samavia	8am to 3pm
Technicians	Rashid	8am to 3pm
Technologist (Bio+ Heam)	Saher	8am to 3pm
Technicians	Shakeel	3pm to 11pm
Technologist (Microbiologist)	Mariam	3pm to 11pm
	Kanwal	
Technicians	Hassan	3pm to 11pm
Technologist (Molecular)	Haris	3pm to 11pm



#### Laboratory sections

#### **Preanalytical Area**

Reception area
Phlebotomy area
Doffing and Donning Area
Wash Room

#### **Analytical Area**

Biochemistry Section
Serology Section
Hematology Section
Special Chemistry
Staining Section
PCR Section

#### Post Analytical Area

Results And Reporting



#### **Phlebotomy**

#### **Products**

- a phlebotomy stool
- tourniquets
- injections (3cc and 5cc) and Butterflies,
- Vacutainers
- Alcohol swabs Permanent markers
- barcode labelling and scanner
- centrifuge
- wheel chair for disables
- Urine Container
- Culture Bottles
- Sample Racks
- Preservatives

#### **Products company Names:**

- ✓ Centrifuge: M-800 China
- ✓ Vacutainers:ImmuneMed,Bolton,
  Demophorious
- **✓ Butterflies:** Demophorious
- ✓ Injections: B.M Injections, Al-Shifa Injections, Zindagi

#### **Vendors:**

- Mian Scientific Corporation (PVT) Ltd.
  - Faisal Pharmaceutical Industries
  - The Faisalabad Scientific Stores



demophorius

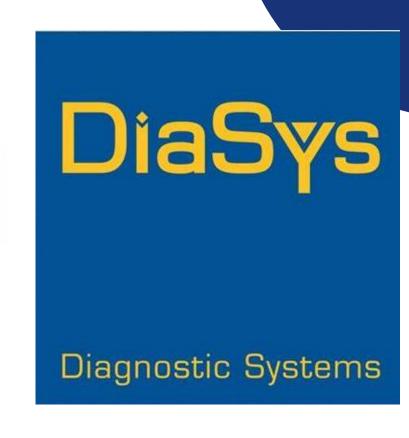




#### **Chemistry Reagents**







- Mian & Sons Scientific Trader
- Innovative Enterprise

#### **Chemistry Analyzers**











Micro lab 300

**Automation** 

(In Future)







**Biossays 240 Plus** 



#### **Vendors:**

- Mian Scientific Corporation (PVT) Ltd.
  - Asad Medical Complex (AMC)



**Selectra ProM** 

#### **BIOCHEMISTRY**

#### **Special Chemistry**











**CLIA** (chemiluminescen ce immunoassay)



Diagnostics Worldwide



**HumaCLIA 150** 

- Mian Scientific Corporation (PVT) Ltd.
  - Asad Medical Complex (AMC)

#### **BIOCHEMISTRY**



#### **Adjustor stand**







HumaPette Linear Stand

LKTC-L Controller



Adjustors (10-100uL) (100-1000uL)

Glass Tubes, plastic tubes, tips (yellow+Blue)

**Distilled Water** 





#### **Vendor**

- Lyallpur Scientific Store
- Human Diagnostics Sheikupura road Faisalabad
- Innovative Enterprise





#### Immunochromatography kits



Rapid Card Tests ANA, RA Factor, CRP



**Abbott** 

- Mian Scientific Corporation (PVT) Ltd.
  - Innovative Enterprise





#### **Hematology Section**

#### **CBC Analyzers**



















#### **HBA1C Meter**

**A1c EZ 2.0 (POCT)** 





- Mian Scientific Corporation (PVT) Ltd.
  - Asad Medical Complex (AMC)
  - Biorays main Akbarabad, Faisalabad





**Stains** 





**Group set** 





PT, APTT, D-dimer



- Mian Scientific Corporation (PVT) Ltd.
  - Innovative Enterprise

# PCR Section

#### **PCR Instruments**









PCR Reagent







Micro-Centrifuge





**HuMax Micro** 



#### Binocular Microscope





**Carl Zeiss** 

Stains, Agar Powder









**HumaScope LightLED** 

Petri Dishes, Staining Stand







**SD-Uro Color** 



- Mian Scientific Corporation (PVT) Ltd.
  - Asad Medical Complex (AMC)
  - Biorays main Akbarabad, Faisalabad





# Health Scan Our Lab Quality Measures

#### **Standard Operating Procedures (SOPs):**

Uniform SOPs for all departments to ensure consistency and accuracy. Regular review and updates of all procedures.

#### ■ Staff Training and Competency:

Comprehensive training programs for all laboratory personnel.

Regular competency assessments and continuous education.

#### **Equipment Calibration and Maintenance:**

Routine calibration of all equipment to ensure precise measurements.

Scheduled maintenance to prevent equipment failure and downtime.

#### Quality Control Samples:

Daily use of internal and external quality control samples.

Participation in proficiency testing programs to validate accuracy.

Accredited by College of American Pathologists (CAP) and NHS-NEQAS for external quality controls.

#### **External Audits:**

Regular external audits to assess compliance with regulatory standards.

Adherence to accreditation requirements for CAP and NHS-NEQAS.

#### **□** Data Management:

Secure and efficient data handling systems.

Regular audits and validation of test results.

#### **□** Environmental Monitoring:

Regular checks of laboratory conditions (temperature, humidity, etc.).

Adherence to safety and cleanliness standards.

#### ☐ Incident and Error Reporting:

Systematic documentation and analysis of any incidents or errors.

Implementation of corrective and preventive actions.

#### ☐ Customer Feedback:

Collection and review of customer feedback to improve services.

Prompt response to any issues or concerns.







# Post Analytical

# Our Lab Reporting Pad



0123456789 | 0912345678 Healthscanlab@gmail.com

Name

Age : Patient ID

Registered on: \_\_\_\_\_ Collected on: \_\_\_\_\_ Reported on:

#### **Blood Test Report**



**Electronically verified Document Need no stamp.** 

Medical Lab Technologist (DMLT, BMLT)

Dr. ABC (MD, Pathologist)

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# Health Scan laboratory

#### WASTE MANAGEMENT PLAN



- ➤ White Baskets -Non-hazardous
- > Yellow Baskets -Chemical and hazardous
- > Red baskets- hazardous sharp

#### 2. Waste Collection Procedures

- ➤ Daily Collection from each section
- > Safety measures (PPE)

#### 3. Waste Storage and Handling

- > Store in their respective area
- > Proper labelling
- > Use leak proof and puncture proof containers

#### 5.Documentation and Record-Keeping

➤ Waste Log

#### **6.Training and Awareness**

> Staff Training



Plan Address: Chak # 250 Bardayky Near

Abbas Pur Faisalabad

**Contact:** 0300-7131862



## Laboratory Fire Exit Plan

Main Gate: Entry via reception area.

**Corridor:** Connects sections, with a back exit door.

#### **Escape Routes**

#### **Primary Exit:**

- From any section to corridor
- Through reception to main gate
- Gather at front yard/parking lot

#### **Secondary Exit:**

- From any section to corridor
- Through back exit door
- Gather at back yard/parking lot

#### **Emergency Equipment Locations**

• Fire Extinguishers: Corridor and near each section

#### **Assembly Points**

- Primary: Front yard/parking lot
- **Secondary:** Back yard/parking lot

#### **Signage and Maps**

Exit Signs: Fire exit signs are displayed in the labs for exit.

#### **Personnel Training**

Training: Regular sessions on fire exit and emergency procedures







# Budget

<b>Budget Name</b>	Amount
Reception	85,000
Waiting Area	156,000
Phlebotomy	10,200
Biochemistry	572,940
Hematology	601,800
<b>Special Chemistry</b>	2,600,000
<b>Molecular Section</b>	4,883,000

#### **Total Expenses**

Budget Name	Amount	
Staff Budget	619,000	
Lab Sections Budget	9,261,740	
Other Expenses	150,000	
Chash in Hand	1,000,000	
Rent	100,000	
Grand Total	11,130,740	



# Thank You.

For Your Attention

www.HealthScan.com