NAME	: **Mr. ASHOK**	MR NO.	: 23020107
AGE/SEX	: 46 Yrs / Male	VISIT NO.	: 169372
REFERRED BY	:	DATE OF COLLECTION	: 04-02-2023 at 09:15 AM
		DATE OF REPORT	: 04-02-2023 at 05:35 PM
REF CENTER	: MEDIWHEEL		

TEST PARAMETER	RESULT	REFERENCE RANGE	SPECIMEN

HAEMATOLOGY

COMPLETE BLOOD COUNT (CBC) WITH ESR

Automated Cell Counter

HAEMOGLOBIN *Colorimetric Method*	16.4 gm/dL	13 - 18 gm/dL	
HEMATOCRIT (PCV) *Calculated*	47.9 %	40 - 54 %	
RED BLOOD CELL (RBC) COUNT *Electrical Impedance*	5.5 million/cu.mm	4.5 - 5.9 million/cu.mm	
PLATELET COUNT *Electrical Impedance*	3.4 Lakhs/cumm	1.5 - 4.5 Lakhs/cumm	
MEAN CELL VOLUME (MCV) *Calculated*	87.0 fl	80 - 100 fl	
Note : All normal and abnormal platelet counts are cross checked on peripheral smear.			
MEAN CORPUSCULAR HEMOGLOBIN (MCH) *Calculated*	29.8 pg	26 - 34 pg	
MEAN CORPUSCULAR HEMOGLOBIN CONCENTRATION (MCHC) *Calculated*	34.3 %	31 - 35 %	
TOTAL WBC COUNT (TC) *Electrical Impedance*	7910.0 cells/cumm	4000 - 11000 cells/cumm	
NEUTROPHILS *VCS Technology/Microscopic*	50 %	40 - 75 %	
LYMPHOCYTES *VCS Technology/Microscopic*	**40** %	25 - 40 %	

DIFFERENTIAL COUNT

EOSINOPHILS *VCS Technology/Microscopic*	04 %	0 - 7 %	
MONOCYTES *VCS Technology/Microscopic*	06 %	1 - 8 %	
BASOPHILS *Electrical Impedance*	00 %		
ESR *Westergren Method*	**20** mm/hr	0 - 15 mm/hr	
BLOOD GROUP & Rh TYPING *Tube Agglutination (Forward and Reverse)*	"A" Positive		

Dr. KRISHNA MURTHY
MD
BIOCHEMIST

Lab Seal

Dr. VAMSEEDHAR.A
D.C.P, M.D
CONSULTANT PATHOLOGIST

The laboratory values And Normal values need to be interpreted based on patients clinical characteristics. The values in reference range is for an average normal individual which may vary depending upon age, sex and other characteristics.

NAME	:	**Mr. ASHOK**	MR NO.	:	23020107
AGE/SEX	:	46 Yrs / Male	VISIT NO.	:	169372
REFERRED BY	:		DATE OF COLLECTION	:	04-02-2023 at 09:15 AM
			DATE OF REPORT	:	04-02-2023 at 05:35 PM
REF CENTER	:	MEDIWHEEL			

TEST PARAMETER	RESULT	REFERENCE RANGE	SPECIMEN
GLYCATED HAEMOGLOBIN (HbA1C) *HPLC*	7.3 %	**American Diabetic Association (ADA) recommendations:** Non diabetic adults : <5.7 % At risk (Pre diabetic): 5.7 – 6.4% Diabetic : >/= 6.5% **Therapeutic goal for glycemic control :** Goal for therapy: < 7.0% Action suggested: > 8.0%	
ESTIMATED AVERAGE GLUCOSE (eAG) *Calculation*	162.81 mg/dL		

Comments:

This assay is useful for diagnosing Diabetes and evaluating long term control of blood glucose concentrations in diabetic patients.It reflects the mean glucose concentration over the previous period of 8 to 12 weeks and is a better indicator of long term glycemic control as compared with blood and urine glucose measurements. This provides a additional criterion for assessing glucose control because glycated hemoglobin values are free of day-to-day glucose fluctuation and are unaffected by exercise or food ingestion.

After a sudden alteration in blood glucose concentration, the rate of change of HbA1c is rapid during initial 2 months, followed by more gradual change approaching steady state 3 months later.

CLINICAL BIOCHEMISTRY

CREATININE *Jaffe Method*	1.23 mg/dL	0.8 - 1.4 mg/dL

Dr. KRISHNA MURTHY
MD
BIOCHEMIST

Lab Seal

Dr. VAMSEEDHAR.A
D.C.P, M.D
CONSULTANT PATHOLOGIST

The laboratory values And Normal values need to be interpreted based on patients clinical characteristics. The values in reference range is for an average normal individual which may vary depending upon age, sex and other characteristics.

NAME	: **Mr. ASHOK**	MR NO.	: 23020107
AGE/SEX	: 46 Yrs / Male	VISIT NO.	: 169372
REFERRED BY	:	DATE OF COLLECTION	: 04-02-2023 at 09:15 AM
		DATE OF REPORT	: 04-02-2023 at 05:35 PM
REF CENTER	: MEDIWHEEL		

TEST PARAMETER	RESULT	REFERENCE RANGE	SPECIMEN
LIPID PROFILE TEST *Spectrometry*			
TOTAL CHOLESTEROL *Cholesterol Oxidase-Peroxidase (CHOD-POD)*	**237** mg/dL	up to 200 mg/dL Border Line: 200 – 240 mg/dL High: > 240 mg/dL	
TRIGLYCERIDES *Glycerol Peroxidase-Peroxidase (GPO-POD)*	**254.5** mg/dL	up to 150 mg/dL Desirable: <150 mg/dL Border Line: 150 – 200 mg/dL High: >200 – 500 mg/dL Very High: > 500 mg/dL	
HDL CHOLESTEROL - DIRECT *PEG-Cholesterol Esterase*	48 mg/dl	40 - 60 mg/dl >/= 60mg/dL - Excellent (protects against heart disease) 40-59 mg/dL - Higher the better <40 mg/dL - Lower than desired (major risk for heart disease)	
LDL CHOLESTEROL - DIRECT *Cholesterol Esterase-Cholesterol Oxidase*	**138.1** mg/dL	up to 100 mg/dL 100-129 mg/dL- Near optimal/above optimal 130-159 mg/dL- Borderline High 160-189 mg/dL- High 190->190 mg/dL - Very High	
VLDL CHOLESTEROL *Calculation*	**50.9** mg/dL	2 - 30 mg/dL	
TOTAL CHOLESTROL/HDL RATIO *Calculation*	**4.9**	up to 3.5 3.5-5.0 - Moderate >5.0 - High	
LDL/HDL RATIO *Calculation*	**2.9**	up to 2.5 2.5-3.3 - Moderate >3.3 - High	
BLOOD UREA *UREASE-GLUTAMATE DEHYDROGENASE (GLDH)*	**11.8** mg/dL	15 - 50 mg/dL	
CREATININE *Jaffe Kinetic*	1.23 mg/dL	0.4 - 1.4 mg/dL	
URIC ACID *Uricase-Peroxidase*	5.8 mg/dL	3 - 7.2 mg/dL	
SERUM ELECTROLYTES			
SODIUM *Ion Selective Electrode (ISE)*	137.1 mmol/L	136 - 145 mmol/L	
POTASSIUM *Ion Selective Electrode (ISE)*	4.21 mmol/L	3.5 - 5.2 mmol/L	
CHLORIDE *Ion Selective Electrode (ISE)*	101 mmol/L	97 - 111 mmol/L	

Dr. KRISHNA MURTHY
MD
BIOCHEMIST

Lab Seal

Dr. VAMSEEDHAR.A
D.C.P, M.D
CONSULTANT PATHOLOGIST

The laboratory values And Normal values need to be interpreted based on patients clinical characteristics. The values in reference range is for an average normal individual which may vary depending upon age, sex and other characteristics.

NAME	: **Mr. ASHOK**	MR NO.	: 23020107
AGE/SEX	: 46 Yrs / Male	VISIT NO.	: 169372
REFERRED BY	:	DATE OF COLLECTION	: 04-02-2023 at 09:15 AM
		DATE OF REPORT	: 04-02-2023 at 05:35 PM
REF CENTER	: MEDIWHEEL		

TEST PARAMETER	RESULT	REFERENCE RANGE	SPECIMEN
LIVER FUNCTION TEST (LFT) *Spectrometry*			
TOTAL BILIRUBIN *Colorimetric Diazo Method*	0.85 mg/dL	0.2 - 1.2 mg/dL	
DIRECT BILIRUBIN *Colorimetric Diazo Method*	**0.46** mg/dL	0 - 0.4 mg/dL	
INDIRECT BILIRUBIN *Calculation*	**0.39** mg/dl	0.2 - 0.8 mg/dl	
S G O T (AST) *IFCC Without Pyridoxal Phosphates*	15 U/L	up to 35 U/L	
S G P T (ALT) *IFCC Without Pyridoxal Phosphates*	34 U/L	up to 50 U/L	
ALKALINE PHOSPHATASE *p-Nitrophenyl Phosphate*	**140** U/L	36 - 113 U/L	
SERUM GAMMA GLUTAMYLTRANSFERASE (GGT) *GCNA-IFCC*	**89.9** U/L	15 - 85 U/L	
TOTAL PROTEIN *Biuret Colorimetric*	6.37 g/dl	6.2 - 8 g/dl	
S.ALBUMIN *Bromocresol Green (BCG)*	3.93 g/dl	3.5 - 5.2 g/dl	
S.GLOBULIN *Calculation*	**2.4** g/dl	2.5 - 3.8 g/dl	
A/G RATIO *Calculation*	**1.6**	1 - 1.5	
FASTING BLOOD SUGAR *Hexokinase*	**147** mg/dl	70 - 110 mg/dl	
POST PRANDIAL BLOOD SUGAR *Hexokinase*	**257** mg/dl	80 - 150 mg/dl	

Dr. KRISHNA MURTHY
MD
BIOCHEMIST

Lab Seal

Dr. VAMSEEDHAR.A
D.C.P, M.D
CONSULTANT PATHOLOGIST

The laboratory values And Normal values need to be interpreted based on patients clinical characteristics. The values in reference range is for an average normal individual which may vary depending upon age, sex and other characteristics.

NAME	:	**Mr. ASHOK**	MR NO.	:	23020107
AGE/SEX	:	46 Yrs / Male	VISIT NO.	:	169372
REFERRED BY	:		DATE OF COLLECTION	:	04-02-2023 at 09:15 AM
			DATE OF REPORT	:	04-02-2023 at 05:35 PM
REF CENTER	:	MEDIWHEEL			

TEST PARAMETER	RESULT	REFERENCE RANGE	SPECIMEN

CLINICAL PATHOLOGY

URINE ROUTINE & MICROSCOPIC
Strps & Microscopy

PHYSICAL EXAMINATION

Colour *Visual Method*	Pale Yellow	Pale yellow- yellow
Appearance *Visual Method*	Clear	Clear/Transparent
Specific Gravity *Strips Method*	1.020	1.005-1.035
pH	6.0	4.6-8.5

CHEMICAL EXAMINATION (DIPSTICK)

Protein *Strips Method*	Nil	Nil -Trace
Glucose *Strips Method*	Nil	Nil
Blood *Strips Method*	Negative	Negative
Ketone Bodies *Strips Method*	Absent	Negative
Urobilinogen *Strips Method*	Normal	Normal
Bile Salt *Strips Method*	Negative	Negative
Bilirubin *Strips Method*	Negative	Negative
Bile Pigments	Negative	NIL

MICROSCOPY

Pus Cells (WBC) *Light Microscopic*	2 - 3 /hpf	0-5/hpf
Epithelial Cells *Light Microscopic*	1 - 2 /hpf	0-4/hpf
RBC *Light Microscopic*	Not Seen /hpf	0-2/hpf
Cast *Light Microscopic*	NIL	NIL
Crystal *Light Microscopic*	NIL	Nil

FASTING URINE SUGAR (FUS)	NIL	NIL
POSTPRANDIAL URINE SUGAR	0.5 %	NIL

Dr. KRISHNA MURTHY
MD
BIOCHEMIST

Lab Seal

Dr. VAMSEEDHAR.A
D.C.P, M.D
CONSULTANT PATHOLOGIST

The laboratory values And Normal values need to be interpreted based on patients clinical characteristics. The values in reference range is for an average normal individual which may vary depending upon age, sex and other characteristics.

NAME	:	**Mr. ASHOK**	MR NO.	:	23020107
AGE/SEX	:	46 Yrs / Male	VISIT NO.	:	169372
REFERRED BY	:		DATE OF COLLECTION	:	04-02-2023 at 09:15 AM
			DATE OF REPORT	:	04-02-2023 at 05:35 PM
REF CENTER	:	MEDIWHEEL			

TEST PARAMETER	RESULT	REFERENCE RANGE	SPECIMEN
		IMMUNOASSAY	
THYROID PROFILE			
TOTAL TRIIODOTHYRONINE (T3) *CMIA*	1.15 ng/mL	0.87 - 1.78 ng/mL	
TOTAL THYROXINE (T4) *CMIA*	7.07 µg/dL	6.09 - 12.23 µg/dL	
THYROID STIMULATING HORMONE (TSH) *CMIA*	1.10 µlU/mL	0.38 - 5.33 µlU/mL 1st Trimester: 0.05 - 3.70 2nd Trimester: 0.31 – 4.35 3rd Trimester: 0.41 – 5.18	

Note:

- *TSH levels are subject to circadian variation, reaching peak levels between 2 - 4.a.m. and at a minimum between 6-10 pm. The variation is of the order of 50%, hence time of the day has influence on the measured serum TSH concentrations.*
- Recommended test for T3 and T4 is unbound fraction or free levels as it is metabolically active.
- Physiological rise in Total T3 / T4 levels is seen in pregnancy and in patients on steroid therapy.

Clinical Use:

- *Primary Hypothyroidism*
- *Hyperthyroidism*
- *Hypothalamic - Pituitary hypothyroidism*
- *Inappropriate TSH secretion*
- *Nonthyroidal illness*
- *Autoimmune thyroid disease*
- *Pregnancy associated thyroid disorders*
- *Thyroid dysfunction in infancy and early childhood*

PROSTATIC SPECIFIC ANTIGEN (PSA) *ECLIA*			
PROSTATIC SPECIFIC ANTIGEN (PSA) *CMIA*	0.60 ng/mL	Up to 4ng/mL: Normal 4-10 ng/mL Hypertrophy & benign genito urinary conditions. >10 ng/mL Suspicious of malignancy.	

PSA is used for monitoring patients with a history of prostate cancer and as an early indicator of recurrence and response to treatment. The test is commonly used for Prostate cancer screening.

Dispatched by: KIRAN

**** End of Report ****

Printed by: Kiran kumar H P on 04-02-2023 at 05:35 PM

Dr. KRISHNA MURTHY
MD
BIOCHEMIST

Lab Seal

Dr. VAMSEEDHAR.A
D.C.P, M.D
CONSULTANT PATHOLOGIST

The laboratory values And Normal values need to be interpreted based on patients clinical characteristics. The values in reference range is for an average normal individual which may vary depending upon age, sex and other characteristics.