

(A Unit of KOS Healthcare)



Dr. Vinay Chopra
MD (Pathology & Microbiology)
Chairman & Consultant Pathologist

Dr. Yugam Chopra MD (Pathology) CEO & Consultant Pathologist

NAME : Mrs. GANGA DEVI

AGE/ GENDER : 50 YRS/FEMALE **PATIENT ID** : 1750892

COLLECTED BY : REG. NO./LAB NO. : 012502090044

 REFERRED BY
 : 09/Feb/2025 12:12 PM

 BARCODE NO.
 : 01525223
 COLLECTION DATE
 : 09/Feb/2025 12:14 PM

 CLIENT CODE.
 : KOS DIAGNOSTIC LAB
 REPORTING DATE
 : 09/Feb/2025 01:23 PM

CLIENT ADDRESS: 6349/1, NICHOLSON ROAD, AMBALA CANTT

Test Name Value Unit Biological Reference interval

HAEMATOLOGY COMPLETE BLOOD COUNT (CBC)

RED BLOOD CELLS (RBCS) COUNT AND INDICES

	HAEMOGLOBIN (HB) by CALORIMETRIC	5.7 ^L	gm/dL	12.0 - 16.0
	RED BLOOD CELL (RBC) COUNT by hydro dynamic focusing, electrical impedence	3.5	Millions/cmm	3.50 - 5.00
	PACKED CELL VOLUME (PCV) by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER	21 ^L	%	37.0 - 50.0
]	MEAN CORPUSCULAR VOLUME (MCV) by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER	60 ^L	fL	80.0 - 100.0
]	MEAN CORPUSCULAR HAEMOGLOBIN (MCH) by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER	16.4 ^L	pg	27.0 - 34.0
]	MEAN CORPUSCULAR HEMOGLOBIN CONC. (MCHC) by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER	27.3 ^L	g/dL	32.0 - 36.0
	RED CELL DISTRIBUTION WIDTH (RDW-CV) by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER	21.1 ^H	%	11.00 - 16.00
	RED CELL DISTRIBUTION WIDTH (RDW-SD) by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER	46.7	fL	35.0 - 56.0
j	MENTZERS INDEX by CALCULATED	17.14	RATIO	BETA THALASSEMIA TRAIT: < 13.0 IRON DEFICIENCY ANEMIA: >13.0
	GREEN & KING INDEX by CALCULATED	36.43	RATIO	BETA THALASSEMIA TRAIT:<= 65.0 IRON DEFICIENCY ANEMIA: > 65.0
1	WHITE BLOOD CELLS (WBCS)			
,	TOTAL LEUCOCYTE COUNT (TLC) by flow cytometry by sf cube & microscopy	7500	/cmm	4000 - 11000
]	NUCLEATED RED BLOOD CELLS (nRBCS) by automated 6 part hematology analyzer	NIL		0.00 - 20.00
	NUCLEATED RED BLOOD CELLS (nRBCS) %	NIL	%	< 10 %



DR.VINAY CHOPRA
CONSULTANT PATHOLOGIST
MBBS, MD (PATHOLOGY & MICROBIOLOGY)

by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER

DR.YUGAM CHOPRA
CONSULTANT PATHOLOGIST





(A Unit of KOS Healthcare)



Dr. Vinay Chopra
MD (Pathology & Microbiology)
Chairman & Consultant Pathologist

Dr. Yugam Chopra MD (Pathology) CEO & Consultant Pathologist

NAME : Mrs. GANGA DEVI

AGE/ GENDER : 50 YRS/FEMALE **PATIENT ID** : 1750892

COLLECTED BY : REG. NO./LAB NO. : 012502090044

 REFERRED BY
 : 09/Feb/2025 12:12 PM

 BARCODE NO.
 : 01525223
 COLLECTION DATE
 : 09/Feb/2025 12:14 PM

 CLIENT CODE.
 : KOS DIAGNOSTIC LAB
 REPORTING DATE
 : 09/Feb/2025 01:23 PM

CLIENT ADDRESS: 6349/1, NICHOLSON ROAD, AMBALA CANTT

Test Name	Value	Unit	Biological Reference interval			
DIFFERENTIAL LEUCOCYTE COUNT (DLC)						
NEUTROPHILS by flow cytometry by sf cube & microscopy	77 ^H	%	50 - 70			
LYMPHOCYTES by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	18 ^L	%	20 - 40			
EOSINOPHILS by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	$\mathbf{0_{\Gamma}}$	%	1 - 6			
MONOCYTES by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	5	%	2 - 12			
BASOPHILS by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	0	%	0 - 1			
ABSOLUTE LEUKOCYTES (WBC) COUNT						
ABSOLUTE NEUTROPHIL COUNT by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	5775	/cmm	2000 - 7500			
ABSOLUTE LYMPHOCYTE COUNT by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	1350	/cmm	800 - 4900			
ABSOLUTE EOSINOPHIL COUNT by flow cytometry by sf cube & microscopy	$\mathbf{0_{T}}$	/cmm	40 - 440			
ABSOLUTE MONOCYTE COUNT by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY	375	/cmm	80 - 880			
ABSOLUTE BASOPHIL COUNT by Flow cytometry by SF cube & microscopy	0	/cmm	0 - 110			
PLATELETS AND OTHER PLATELET PREDICTIVE MARKERS.						
PLATELET COUNT (PLT) by hydro dynamic focusing, electrical impedence	657000 ^H	/cmm	150000 - 450000			
PLATELETCRIT (PCT) by hydro dynamic focusing, electrical impedence	0.54 ^H	%	0.10 - 0.36			
MEAN PLATELET VOLUME (MPV) by hydro dynamic focusing, electrical impedence	8	fL	6.50 - 12.0			
PLATELET LARGE CELL COUNT (P-LCC) by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE	111000 ^H	/cmm	30000 - 90000			
PLATELET LARGE CELL RATIO (P-LCR) by hydro dynamic focusing, electrical impedence	16.8	%	11.0 - 45.0			
PLATELET DISTRIBUTION WIDTH (PDW) by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE	15.3	%	15.0 - 17.0			
ADVICE	KINDLY CORRE	LATE CLINICALLY				



DR.VINAY CHOPRA
CONSULTANT PATHOLOGIST
MBBS, MD (PATHOLOGY & MICROBIOLOGY)

DR.YUGAM CHOPRA CONSULTANT PATHOLOGIST MBBS , MD (PATHOLOGY)

KOS Central Lab: 6349/1, Nicholson Road, Ambala Cantt -133 001, Haryana KOS Molecular Lab: Ilnd Floor, Parry Hotel, Staff Road, Opp. GPO, Ambala Cantt -133 001, Haryana



(A Unit of KOS Healthcare)



Dr. Vinay Chopra MD (Pathology & Microbiology) Chairman & Consultant Pathologist

Dr. Yugam Chopra MD (Pathology) CEO & Consultant Pathologist

: 09/Feb/2025 01:23PM

NAME : Mrs. GANGA DEVI

AGE/ GENDER : 50 YRS/FEMALE **PATIENT ID** : 1750892

COLLECTED BY : 012502090044 REG. NO./LAB NO.

REFERRED BY **REGISTRATION DATE** : 09/Feb/2025 12:12 PM **COLLECTION DATE** BARCODE NO. :01525223 : 09/Feb/2025 12:14PM

: KOS DIAGNOSTIC LAB **CLIENT ADDRESS** : 6349/1, NICHOLSON ROAD, AMBALA CANTT

Test Name Value Unit **Biological Reference interval**

REPORTING DATE

NOTE: TEST CONDUCTED ON EDTA WHOLE BLOOD

RECHECKED

CLIENT CODE.



DR.VINAY CHOPRA CONSULTANT PATHOLOGIST MBBS, MD (PATHOLOGY & MICROBIOLOGY)

DR.YUGAM CHOPRA CONSULTANT PATHOLOGIST MBBS, MD (PATHOLOGY)



KOS Central Lab: 6349/1, Nicholson Road, Ambala Cantt -133 001, Haryana KOS Molecular Lab: IInd Floor, Parry Hotel, Staff Road, Opp. GPO, Ambala Cantt -133 001, Haryana 0171-2643898, +91 99910 43898 | care@koshealthcare.com | www.koshealthcare.com



(A Unit of KOS Healthcare)



Dr. Vinay Chopra MD (Pathology & Microbiology) Chairman & Consultant Pathologist

Dr. Yugam Chopra MD (Pathology) CEO & Consultant Pathologist

NAME : Mrs. GANGA DEVI

AGE/ GENDER : 50 YRS/FEMALE **PATIENT ID** : 1750892

COLLECTED BY :012502090044 REG. NO./LAB NO.

REFERRED BY **REGISTRATION DATE** : 09/Feb/2025 12:12 PM BARCODE NO. :01525223 **COLLECTION DATE** : 09/Feb/2025 12:14PM

: KOS DIAGNOSTIC LAB **CLIENT ADDRESS** : 6349/1, NICHOLSON ROAD, AMBALA CANTT

Value Unit **Biological Reference interval Test Name**

REPORTING DATE

CLINICAL CHEMISTRY/BIOCHEMISTRY GLUCOSE POST PRANDIAL (PP)

GLUCOSE POST PRANDIAL (PP): PLASMA by GLUCOSE OXIDASE - PEROXIDASE (GOD-POD) 83.96 NORMAL: < 140.00 mg/dL

PREDIABETIC: 140.0 - 200.0 DIABETIC: > 0R = 200.0

: 09/Feb/2025 01:44PM

CLIENT CODE.

INTERPRETATION
IN ACCORDANCE WITH AMERICAN DIABETES ASSOCIATION GUIDELINES:

1. A post-prandial plasma glucose level below 140 mg/dl is considered normal.

2. A post-prandial glucose level between 140 - 200 mg/dl is considered as glucose intolerant or prediabetic. A fasting and post-prandial blood test (after consumption of 75 gms of glucose) is recommended for all such patients.

3. A post-prandial plasma glucose level of above 200 mg/dl is highly suggestive of diabetic state. A repeat post-prandial is strongly recommended for all such patients. A fasting plasma glucose level in excess of 125 mg/dl on both occasions is confirmatory for diabetic state.



CONSULTANT PATHOLOGIST MBBS, MD (PATHOLOGY & MICROBIOLOGY)

DR.YUGAM CHOPRA CONSULTANT PATHOLOGIST





(A Unit of KOS Healthcare)



Dr. Vinay Chopra
MD (Pathology & Microbiology)
Chairman & Consultant Pathologist

Dr. Yugam Chopra MD (Pathology) CEO & Consultant Pathologist

NAME : Mrs. GANGA DEVI

AGE/ GENDER : 50 YRS/FEMALE **PATIENT ID** : 1750892

COLLECTED BY : REG. NO./LAB NO. : 012502090044

 REFERRED BY
 : 09/Feb/2025 12:12 PM

 BARCODE NO.
 : 01525223
 COLLECTION DATE
 : 09/Feb/2025 12:14 PM

 CLIENT CODE.
 : KOS DIAGNOSTIC LAB
 REPORTING DATE
 : 09/Feb/2025 03:57 PM

CLIENT ADDRESS : 6349/1, NICHOLSON ROAD, AMBALA CANTT

Test Name Value Unit Biological Reference interval

ENDOCRINOLOGY

THYROID FUNCTION TEST: TOTAL

TRIIODOTHYRONINE (T3): SERUM **0.24^L** ng/mL 0.35 - 1.93

by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)

THYROXINE (T4): SERUM 0.91L $\mu gm/dL$ 4.87 - 12.60 by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)

THYROID STIMULATING HORMONE (TSH): SERUM $> 100.000^{\rm H}$ $\mu \text{IU/mL}$ 0.35 - 5.50 by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)

3rd GENERATION, ULTRASENSITIVE

ADVICE KINDLY CORRELATE CLINICALLY

<u>INTERPRETATION</u>:

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. TSH stimulates the production and secretion of the metabolically active hormones, thyroxine (T4) and triiodothyronine (T3). Failure at any level of regulation of the hypothalamic-pituitary-thyroid axis will result in either underproduction (hypothyroidism) or overproduction (hyperthyroidism) of T4 and/or T3.

CLINICAL CONDITION	Т3	T4	TSH	
Primary Hypothyroidism:	Reduced	Reduced	Increased (Significantly)	
Subclinical Hypothyroidism:	Normal or Low Normal	Normal or Low Normal	High	
Primary Hyperthyroidism:	Increased	Increased	Reduced (at times undetectable)	
Subclinical Hyperthyroidism:	Normal or High Normal	Normal or High Normal	Reduced	

LIMITATIONS:-

- 1. T3 and T4 circulates in reversibly bound form with Thyroid binding globulins (TBG), and to a lesser extent albumin and Thyroid binding Pre Albumin so conditions in which TBG and protein levels alter such as pregnancy, excess estrogens, anabolic steroids and glucocorticoids may falsely affect the T3 and T4 levels and may cause false thyroid values for thyroid function tests.
- 2. Normal levels of T4 can also be seen in Hyperthyroid patients with :T3 Thyrotoxicosis, Decreased binding capacity due to hypoproteinemia or ingestion of certain drugs (e.g.: phenytoin , salicylates).
- 3. Serum T4 levels in neonates and infants are higher than values in the normal adult , due to the increased concentration of TBG in neonate serum.
- 4. TSH may be normal in central hypothyroidism, recent rapid correction of hyperthyroidism or hypothyroidism, pregnancy, phenytoin therapy.

TRIIODOTHYRONINE (T3)		THYROX	INE (T4)	THYROID STIMULATING HORMONE (TSH)		
Age	Refferance Range (ng/mL)	Age	Refferance Range (µg/dL)	Age	Reference Range (μIU/mL)	
0 - 7 Days	0.20 - 2.65	0 - 7 Days	5.90 - 18.58	0 - 7 Days	2.43 - 24.3	
7 Days - 3 Months	0.36 - 2.59	7 Days - 3 Months	6.39 - 17.66	7 Days - 3 Months	0.58 - 11.00	
3 - 6 Months	0.51 - 2.52	3 - 6 Months	6.75 - 17.04	3 Days – 6 Months	0.70 - 8.40	



DR.VINAY CHOPRA
CONSULTANT PATHOLOGIST
MBBS, MD (PATHOLOGY & MICROBIOLOGY)

DR.YUGAM CHOPRA CONSULTANT PATHOLOGIST MBBS , MD (PATHOLOGY)



KOS Central Lab: 6349/1, Nicholson Road, Ambala Cantt -133 001, Haryana



(A Unit of KOS Healthcare)



Dr. Vinay Chopra
MD (Pathology & Microbiology)
Chairman & Consultant Pathologist

Dr. Yugam Chopra

MD (Pathology)

CEO & Consultant Pathologist

NAME : Mrs. GANGA DEVI

AGE/ GENDER : 50 YRS/FEMALE PATIENT ID : 1750892

COLLECTED BY : REG. NO./LAB NO. : 012502090044

 REFERRED BY
 : 09/Feb/2025 12:12 PM

 BARCODE NO.
 : 01525223
 COLLECTION DATE
 : 09/Feb/2025 12:14 PM

 CLIENT CODE.
 : KOS DIAGNOSTIC LAB
 REPORTING DATE
 : 09/Feb/2025 03:57 PM

CLIENT ADDRESS: 6349/1, NICHOLSON ROAD, AMBALA CANTT

Test Name		Value Unit		Biological Reference interval			
6 - 12 Months	0.74 - 2.40	6 - 12 Months	7.10 – 16.16	6 – 12 Months	0.70 - 7.00		
1 - 10 Years	0.92 - 2.28	1 - 10 Years	6.00 - 13.80	1 – 10 Years	0.60 - 5.50		
11- 19 Years	0.35 - 1.93	11 - 19 Years	4.87- 13.20	11 – 19 Years	0.50 - 5.50		
> 20 years (Adults)	0.35 - 1.93	> 20 Years (Adults)	4.87 - 12.60	> 20 Years (Adults)	0.35- 5.50		
	RECOMMENDATIONS OF TSH LEVELS DURING PREGNANCY (μιU/mL)						
1st Trimester			0.10 - 2.50				
2nd Trimester			0.20 - 3.00				
3rd Trimester				0.30 - 4.10			

INCREASED TSH LEVELS:

- 1. Primary or untreated hypothyroidism may vary from 3 times to more than 100 times normal depending upon degree of hypofunction.
- 2. Hypothyroid patients receiving insufficient thyroid replacement therapy.
- 3. Hashimotos thyroiditis
- 4.DRUGS: Amphetamines, iodine containing agents & dopamine antagonist.
- 5. Neonatal period, increase in 1st 2-3 days of life due to post-natal surge

DECREASED TSH LEVELS:

- 1.Toxic multi-nodular goiter & Thyroiditis.
- 2. Over replacement of thyroid hormone in treatment of hypothyroidism.
- 3. Autonomously functioning Thyroid adenoma
- 4. Secondary pituitary or hypothalamic hypothyroidism
- 5. Acute psychiatric illness
- 6. Severe dehydration.
- 7.DRUGS: Glucocorticoids, Dopamine, Levodopa, T4 replacement therapy, Anti-thyroid drugs for thyrotoxicosis.

8. Pregnancy: 1st and 2nd Trimester

*** End Of Report ***



DR.VINAY CHOPRA
CONSULTANT PATHOLOGIST
MBBS, MD (PATHOLOGY & MICROBIOLOGY)

DR.YUGAM CHOPRA CONSULTANT PATHOLOGIST MBBS , MD (PATHOLOGY)



KOS Central Lab: 6349/1, Nicholson Road, Ambala Cantt -133 001, Haryana