

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

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

<b>NAME</b>	: Mrs. NIRMAL JINDAL	<b>PATIENT ID</b>	: 1585293
<b>AGE/ GENDER</b>	: 66 YRS/FEMALE	<b>REG. NO./LAB NO.</b>	: 012408200043
<b>COLLECTED BY</b>	:	<b>REGISTRATION DATE</b>	: 20/Aug/2024 11:59 AM
<b>REFERRED BY</b>	:	<b>COLLECTION DATE</b>	: 20/Aug/2024 12:33PM
<b>BARCODE NO.</b>	: 01515371	<b>REPORTING DATE</b>	: 20/Aug/2024 12:52PM
<b>CLIENT CODE.</b>	: KOS DIAGNOSTIC LAB		
<b>CLIENT ADDRESS</b>	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval
-----------	-------	------	-------------------------------

## HAEMATOLOGY

### HAEMOGLOBIN (HB)

<b>HAEMOGLOBIN (HB)</b> by CALORIMETRIC	10.4 <sup>L</sup>	gm/dL	12.0 - 16.0
--	-------------------	-------	-------------

#### INTERPRETATION:-

Hemoglobin is the protein molecule in red blood cells that carries oxygen from the lungs to the body's tissues and returns carbon dioxide from the tissues back to the lungs.

A low hemoglobin level is referred to as ANEMIA or low red blood count.

#### ANEMIA ( DECREASED HAEMOGLOBIN):


- 1) Loss of blood (traumatic injury, surgery, bleeding, colon cancer or stomach ulcer)
- 2) Nutritional deficiency (iron, vitamin B12, folate)
- 3) Bone marrow problems (replacement of bone marrow by cancer)
- 4) Suppression by red blood cell synthesis by chemotherapy drugs
- 5) Kidney failure
- 6) Abnormal hemoglobin structure (sickle cell anemia or thalassemia).

#### POLYCYTHEMIA (INCREASED HAEMOGLOBIN):

- 1) People in higher altitudes (Physiological)
- 2) Smoking (Secondary Polycythemia)
- 3) Dehydration produces a falsely rise in hemoglobin due to increased haemoconcentration
- 4) Advanced lung disease (for example, emphysema)
- 5) Certain tumors
- 6) A disorder of the bone marrow known as polycythemia rubra vera,
- 7) Abuse of the drug erythropoietin (Epogen) by athletes for blood doping purposes (increasing the amount of oxygen available to the body by chemically raising the production of red blood cells).

**NOTE: TEST CONDUCTED ON EDTA WHOLE BLOOD**



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

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



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

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

<b>NAME</b>	: Mrs. NIRMAL JINDAL	<b>PATIENT ID</b>	: 1585293
<b>AGE/ GENDER</b>	: 66 YRS/FEMALE	<b>REG. NO./LAB NO.</b>	: 012408200043
<b>COLLECTED BY</b>	:	<b>REGISTRATION DATE</b>	: 20/Aug/2024 11:59 AM
<b>REFERRED BY</b>	:	<b>COLLECTION DATE</b>	: 20/Aug/2024 12:33PM
<b>BARCODE NO.</b>	: 01515371	<b>REPORTING DATE</b>	: 20/Aug/2024 01:28PM
<b>CLIENT CODE.</b>	: KOS DIAGNOSTIC LAB		
<b>CLIENT ADDRESS</b>	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval
-----------	-------	------	-------------------------------

### CLINICAL CHEMISTRY/BIOCHEMISTRY

#### GLUCOSE RANDOM (R)

GLUCOSE RANDOM (R): PLASMA by GLUCOSE OXIDASE - PEROXIDASE (GOD-POD)	91.07	mg/dL	NORMAL: < 140.00 PREDIABETIC: 140.0 - 200.0 DIABETIC: > OR = 200.0
---	-------	-------	--

#### INTERPRETATION

##### IN ACCORDANCE WITH AMERICAN DIABETES ASSOCIATION GUIDELINES:

1. A random plasma glucose level below 140 mg/dl is considered normal.
2. A random 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 random 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.



  
 DR. VINAY CHOPRA

CONSULTANT PATHOLOGIST  
 MBBS, MD (PATHOLOGY & MICROBIOLOGY)

  
 DR. YUGAM CHOPRA

CONSULTANT PATHOLOGIST  
 MBBS, MD (PATHOLOGY)



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

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

<b>NAME</b>	: Mrs. NIRMAL JINDAL	<b>PATIENT ID</b>	: 1585293
<b>AGE/ GENDER</b>	: 66 YRS/FEMALE	<b>REG. NO./LAB NO.</b>	: 012408200043
<b>COLLECTED BY</b>	:	<b>REGISTRATION DATE</b>	: 20/Aug/2024 11:59 AM
<b>REFERRED BY</b>	:	<b>COLLECTION DATE</b>	: 20/Aug/2024 12:33PM
<b>BARCODE NO.</b>	: 01515371	<b>REPORTING DATE</b>	: 20/Aug/2024 01:40PM
<b>CLIENT CODE.</b>	: KOS DIAGNOSTIC LAB		
<b>CLIENT ADDRESS</b>	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval
-----------	-------	------	-------------------------------

<b>UREA: SERUM</b> by UREASE - GLUTAMATE DEHYDROGENASE (GLDH)	92.45 <sup>H</sup>	mg/dL	10.00 - 50.00
--	--------------------	-------	---------------



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

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



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


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

<b>NAME</b>	: Mrs. NIRMAL JINDAL	<b>PATIENT ID</b>	: 1585293
<b>AGE/ GENDER</b>	: 66 YRS/FEMALE	<b>REG. NO./LAB NO.</b>	: 012408200043
<b>COLLECTED BY</b>	:	<b>REGISTRATION DATE</b>	: 20/Aug/2024 11:59 AM
<b>REFERRED BY</b>	:	<b>COLLECTION DATE</b>	: 20/Aug/2024 12:33PM
<b>BARCODE NO.</b>	: 01515371	<b>REPORTING DATE</b>	: 20/Aug/2024 01:40PM
<b>CLIENT CODE.</b>	: KOS DIAGNOSTIC LAB		
<b>CLIENT ADDRESS</b>	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval
<b>CREATININE</b>			
CREATININE: SERUM by ENZYMATIC, SPECTROPHOTOMETRY	2.85 <sup>H</sup>	mg/dL	0.40 - 1.20



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

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





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

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

<b>NAME</b>	: Mrs. NIRMAL JINDAL	<b>PATIENT ID</b>	: 1585293
<b>AGE/ GENDER</b>	: 66 YRS/FEMALE	<b>REG. NO./LAB NO.</b>	: 012408200043
<b>COLLECTED BY</b>	:	<b>REGISTRATION DATE</b>	: 20/Aug/2024 11:59 AM
<b>REFERRED BY</b>	:	<b>COLLECTION DATE</b>	: 20/Aug/2024 12:33PM
<b>BARCODE NO.</b>	: 01515371	<b>REPORTING DATE</b>	: 20/Aug/2024 01:08PM
<b>CLIENT CODE.</b>	: KOS DIAGNOSTIC LAB		
<b>CLIENT ADDRESS</b>	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval
-----------	-------	------	-------------------------------

#### ELECTROLYTES COMPLETE PROFILE

SODIUM: SERUM <i>by ISE (ION SELECTIVE ELECTRODE)</i>	139.1	mmol/L	135.0 - 150.0
POTASSIUM: SERUM <i>by ISE (ION SELECTIVE ELECTRODE)</i>	5.23 <sup>H</sup>	mmol/L	3.50 - 5.00
CHLORIDE: SERUM <i>by ISE (ION SELECTIVE ELECTRODE)</i>	104.32	mmol/L	90.0 - 110.0

#### INTERPRETATION:-

##### SODIUM:-

Sodium is the major cation of extra-cellular fluid. Its primary function in the body is to chemically maintain osmotic pressure & acid base balance & to transmit nerve impulse.

##### HYPONATREMIA (LOW SODIUM LEVEL) CAUSES:-

1. Low sodium intake.
2. Sodium loss due to diarrhea & vomiting with adequate water and inadequate salt replacement.
3. Diuretics abuses.
4. Salt losing nephropathy.
5. Metabolic acidosis.
6. Adrenocortical insufficiency .
7. Hepatic failure.

##### HYPERNATREMIA (INCREASED SODIUM LEVEL) CAUSES:-

1. Hyperapnea (Prolonged)
2. Diabetes insipidus
3. Diabetic acidosis
4. Cushing's syndrome
5. Dehydration

##### POTASSIUM:-

Potassium is the major cation in the intracellular fluid. 90% of potassium is concentrated within the cells. When cells are damaged, potassium is released in the blood.


##### HYPOKALEMIA (LOW POTASSIUM LEVELS):-


1. Diarrhoea, vomiting & malabsorption.
2. Severe Burns.
3. Increased Secretions of Aldosterone

##### HYPERKALEMIA (INCREASED POTASSIUM LEVELS):-

1. Oliguria
2. Renal failure or Shock
3. Respiratory acidosis



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

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



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

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

<b>NAME</b>	: Mrs. NIRMAL JINDAL	<b>PATIENT ID</b>	: 1585293
<b>AGE/ GENDER</b>	: 66 YRS/FEMALE	<b>REG. NO./LAB NO.</b>	: 012408200043
<b>COLLECTED BY</b>	:	<b>REGISTRATION DATE</b>	: 20/Aug/2024 11:59 AM
<b>REFERRED BY</b>	:	<b>COLLECTION DATE</b>	: 20/Aug/2024 12:33PM
<b>BARCODE NO.</b>	: 01515371	<b>REPORTING DATE</b>	: 20/Aug/2024 01:08PM
<b>CLIENT CODE.</b>	: KOS DIAGNOSTIC LAB		
<b>CLIENT ADDRESS</b>	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		


Test Name	Value	Unit	Biological Reference interval
-----------	-------	------	-------------------------------

4.Hemolysis of blood

\*\*\* End Of Report \*\*\*



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

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

