



PC 1001

RML- Quality Assurance Program (RML-QAP)



BIO-CHEMISTRY-01

ALL METHOD REPORT

Cycle - 12/2023

Round No - 08

Date: 31/08/2023

Lab Code: 2432

Parameters	Units	No.of. Participants	Robust Mean	Robust Standard deviation (SD)	Uncertainty of Assign Values	Range (± 2 SD)	Your Value	Z Score
Albumin	g/dL	220	2.9	0.2	0.02	2.5 - 3.4	2.9	-0.2
Alkaline Phosphatase	U/L	212	331.6	56.8	4.88	217.9 - 445.2	343	0.2
Bilirubin Total	mg/dL	223	5.2	0.6	0.05	4.0 - 6.4	5.4	0.4
Calcium(Total)	mg/dL	199	12.3	0.7	0.07	10.8 - 13.8	10.9	-1.9
Cholesterol (Total)	mg/dL	217	267.0	14.5	1.23	238.0 - 296.0	259	-0.6
Creatinine	mg/dL	226	4.1	0.3	0.03	3.4 - 4.8	4.0	-0.3
Glucose	mg/dL	229	264.2	17.1	1.41	229.9 - 298.4	233	-1.8
HDL	mg/dL	199	77.7	20.6	1.83	36.5 - 118.9	42.0	-1.7
Potassium	mEq/L	182	5.7	0.3	0.02	5.2 - 6.2	5.7	0.1
Protein (Total)	g/dl	218	4.6	0.3	0.03	3.9 - 5.2	4.3	-0.8
Sodium	mEq/L	182	154.7	5.0	0.46	144.7 - 164.6	152	-0.5
SGPT/ALT	U/L	224	132.1	11.8	0.98	108.6 - 155.6	135	0.2
SGOT/AST	U/L	223	133.9	10.7	0.90	112.5 - 155.4	130	-0.4
Triglyceride	mg/dL	216	250.3	18.0	1.53	214.3 - 286.4	225	-1.4
Urea	mg/dL	224	114.2	8.6	0.72	97.1 - 131.4	114	0.0
Uric Acid	mg/dl	219	9.3	0.9	0.07	7.6 - 11.0	10.1	0.9

Interpretation of Z Score :

Z Score Value(+/-)	$[Z] \leq 2.0$	$2.0 < [Z] < 3.0$	$[Z] \geq 3.0$
Interpretation	Satisfactory Performance No signal	Questionable Warning Signal	Unsatisfactory Performance action Signal

Legends	(*) Excluded From Group Mean	{ } Not Reported	(#)Late Result Submission	(\$)Reported in other Unit
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Chief Coordinator

Dr.Sanjay Mehrotra

Checked By:

Prepared by: NN

Programme Director

Dr.Bandana Mehrotra

Page 1 of 7



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RML- Quality Assurance Program (RML-QAP)



BIO-CHEMISTRY-01

METHOD WISE REPORT

Lab Code: 2432

Cycle - 12/2023

Round No - 8

Date: 31/08/2023

Note: Your Lab is not the part of this method group.

Parameters	Units	Method Group	No. of Participants	Robust Mean	Robust Standard deviation (SD)	Uncertainty of Assign Values	Range (± 2 SD)	Your Value	Z Score
Albumin	g/dL	Bromcresal Green (BCG)	113	2.9	0.2	0.02	2.6 - 3.3	-	-
Alkaline Phosphatase	U/L	PNPP	114	321.6	52.0	6.08	217.7 - 425.5	-	-
Bilirubin Total	mg/dL	Diazonium Ion	77	5.2	0.5	0.07	4.2 - 6.3	-	-
Calcium(Total)	mg/dL	Arsenazo iii	77	12.1	0.9	0.12	10.4 - 13.9	-	-
Cholesterol (Total)	mg/dL	Cholestrol Oxidase,esterase, peroxidase	116	267.5	13.6	1.58	240.2 - 294.7	-	-
Creatinine	mg/dL	Alkaline Picrate	79	4.1	0.4	0.05	3.4 - 4.8	-	-
Glucose	mg/dL	Glucose oxidase,hydrogen peroxide(Trinder)	90	264.9	18.7	2.46	227.6 - 302.2	-	-
HDL	mg/dL	Direct Measure	97	81.9	17.7	2.25	46.5 - 117.4	-	-
Potassium	mEq/L	ISE Direct	84	5.7	0.2	0.03	5.3 - 6.1	-	-
Protein (Total)	g/dl	Protein Biuret	113	4.5	0.3	0.04	3.9 - 5.2	-	-
Sodium	mEq/L	ISE Direct	82	155.5	4.1	0.57	147.2 - 163.8	-	-
SGPT/ALT	U/L	UV with P5P	58	132.9	12.0	1.97	108.9 - 157.0	-	-
SGOT/AST	U/L	UV with P5P	60	133.9	12.0	1.93	109.9 - 157.8	-	-
Triglyceride	mg/dL	Enzymatic	112	252.6	13.7	1.62	225.2 - 280.0	-	-
Urea	mg/dL	Urease	116	114.7	8.2	0.95	98.3 - 131.0	-	-
Uric Acid	mg/dl	Uricase	121	9.3	0.8	0.10	7.6 - 10.9	-	-

Interpretation of Z Score :

Z Score Value(+/-)	$[Z] \leq 2.0$	$2.0 < [Z] < 3.0$	$[Z] \geq 3.0$
Interpretation	Satisfactory Performance No signal	Questionable Warning Signal	Unsatisfactory Performance action Signal

Legends	(*) Excluded From Group Mean	{ } Not Reported	(#)Late Result Submission	(\$)Reported in other Unit
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Chief Coordinator

Programme Director

Dr.Sanjay Mehrotra

Dr.Bandana Mehrotra

Checked by:

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Prepared by: NN

Doc. No.: ASS / FR / 03A / R 01 / Dt.: 05.01.2022



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RML- Quality Assurance Program (RML-QAP)



BIO-CHEMISTRY-01

METHOD WISE REPORT-PART-02

Cycle - 12/2023

Round No - 8

Date: 31/08/2023

Lab Code: 2432

Note: Your lab is not the part of this Method Group

Parameters	Units	Method Group	No. of Participants	Robust Mean	Robust Standard deviation (SD)	Uncertainty of Assign Values	Range (± 2 SD)	Your Value	Z Score
Creatinine	mg/dl	Enzymatic	45	4.1	0.3	0.05	3.6 - 4.7	-	-
Glucose	mg/dL	Hexokinase	38	271.1	8.1	1.64	255.0-287.3	-	-
HDL	mg/dL	Direct Measure, Immunoinhibition	21	78.7	16.2	4.42	46.3 - 111.1	-	-
SGPT/ALT	U/L	UV without PSP	60	132.1	11.0	1.78	110.1 - 154.2	-	-
SGOT/AST	U/L	UV without PSP	57	135.1	9.5	1.57	116.1 - 154.1	-	-
Urea	mg/dl	Urease, UV	53	112.6	11.5	1.97	89.7 - 135.5	-	-

Interpretation of Z Score :

Z Score Value(+/-)	$ Z \leq 2.0$	$2.0 < Z < 3.0$	$ Z \geq 3.0$
Interpretation	Satisfactory Performance No signal	Questionable Warning Signal	Unsatisfactory Performance action Signal

Legends	(*) Excluded From Group Mean	{ } Not Reported	(#)Late Result Submission	(\$)Reported in other Unit
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Chief Coordinator

Dr. Sanjay Mehrotra

Checked By:

Prepared by: NN

Programme Director

Dr. Bandana Mehrotra

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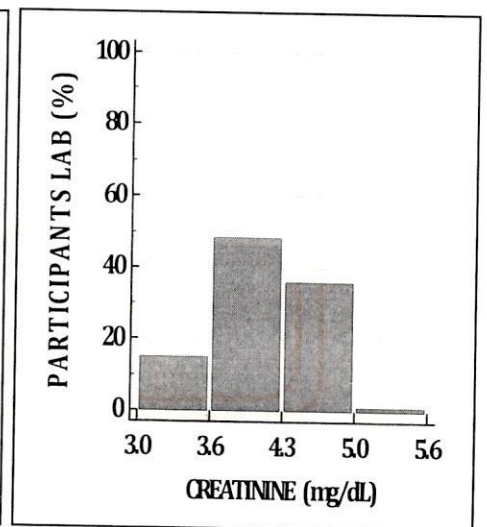
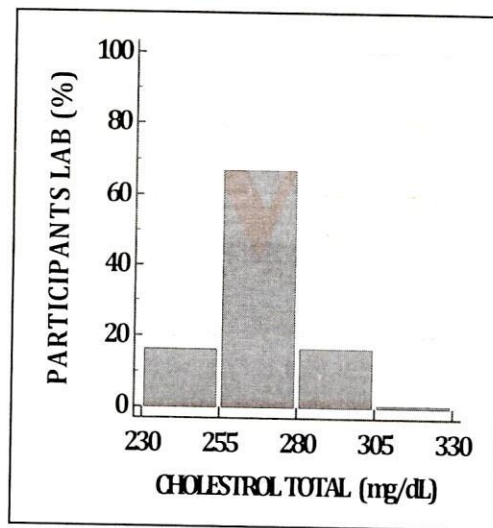
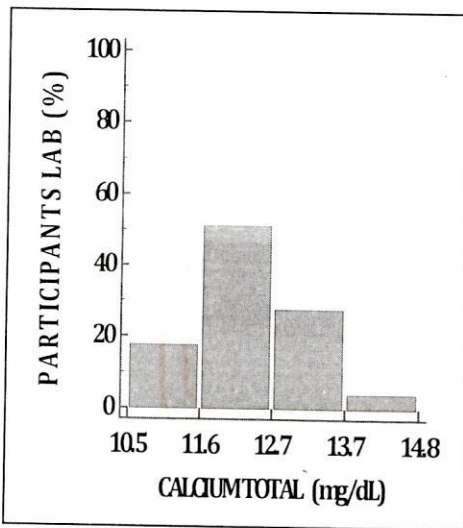
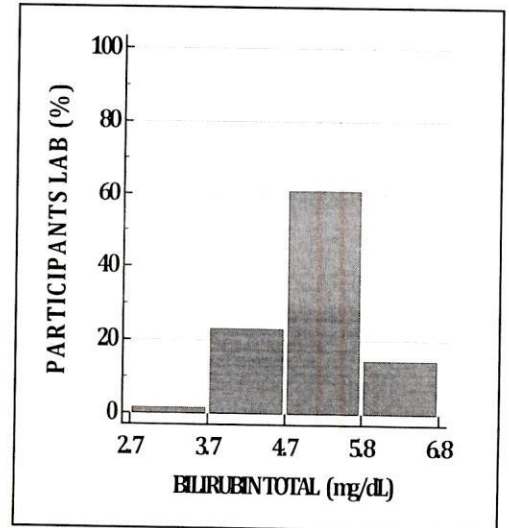
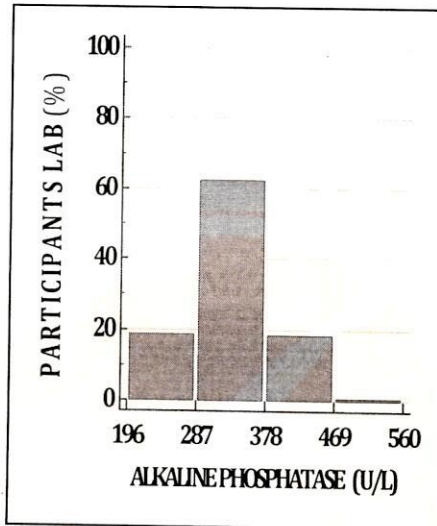
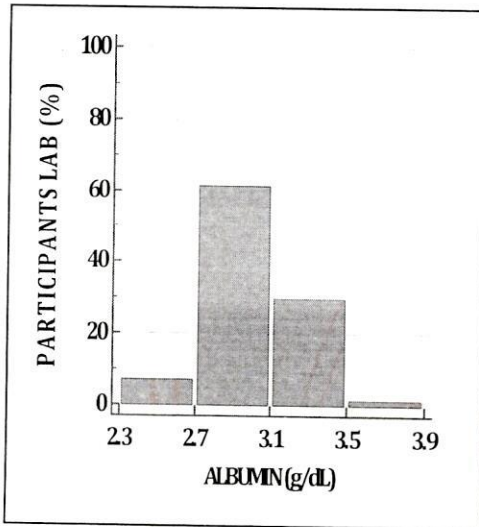
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BIO-CHEMISTRY-01

GRAPHICAL REPORT

Cycle - 12/2023
Round- 8

Date: 31/08/2023

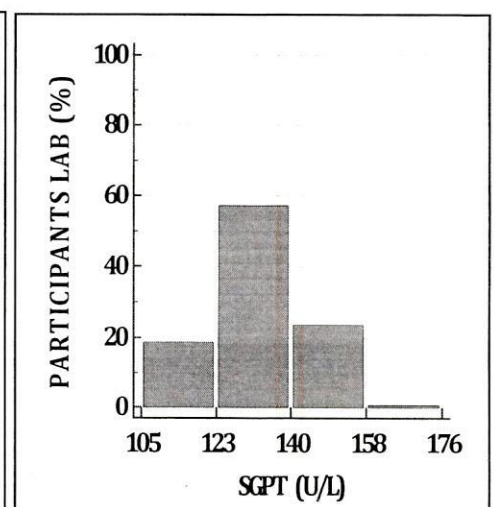
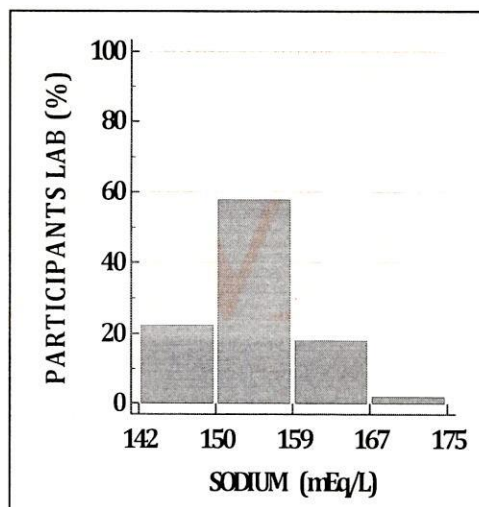
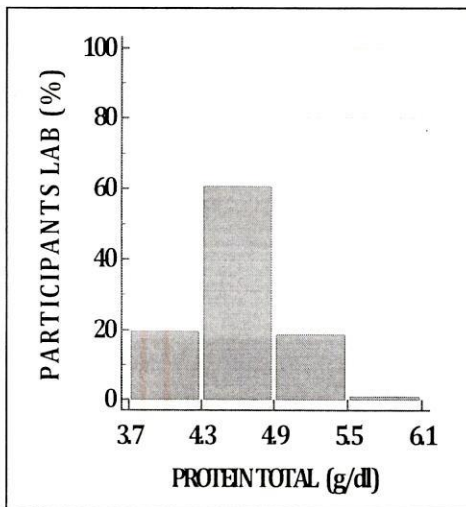
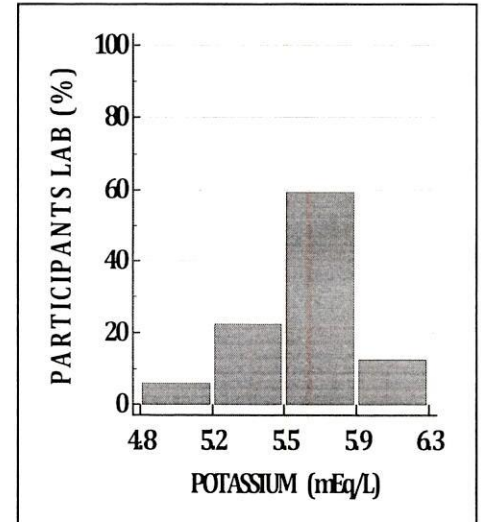
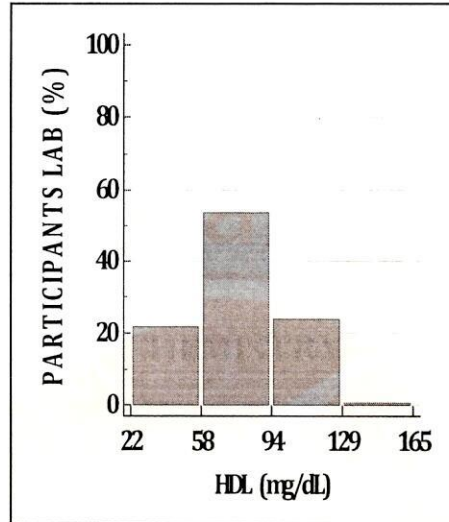
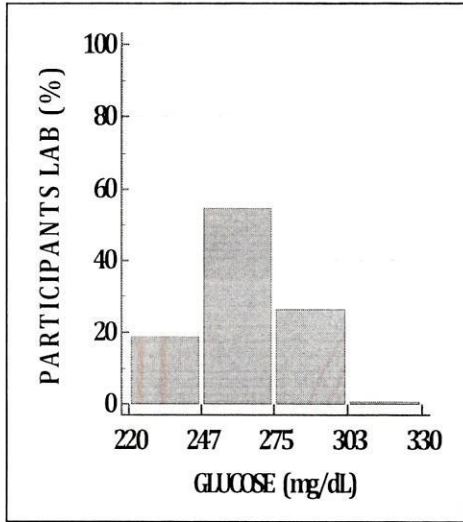


BIO-CHEMISTRY-01

GRAPHICAL REPORT

Cycle - 12/2023
Round- 8

Date: 31/08/2023



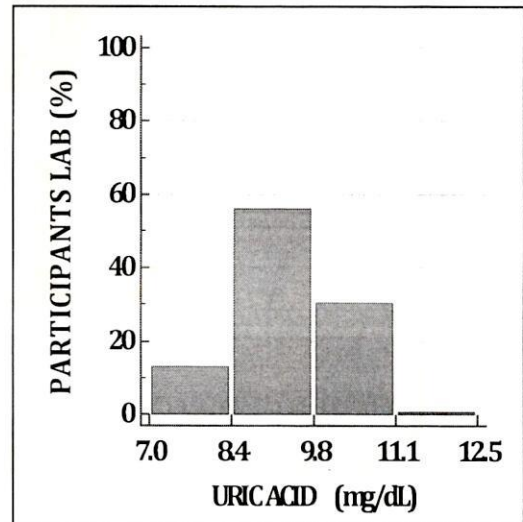
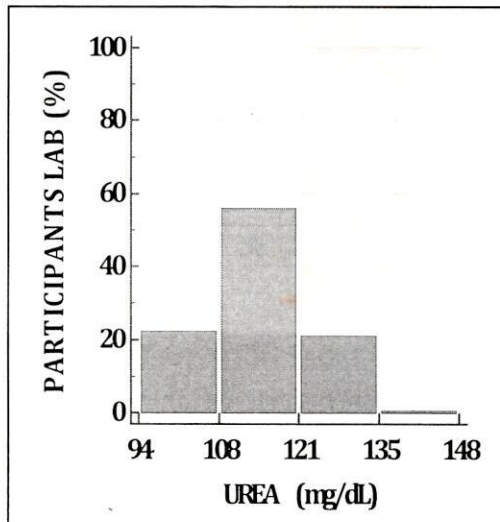
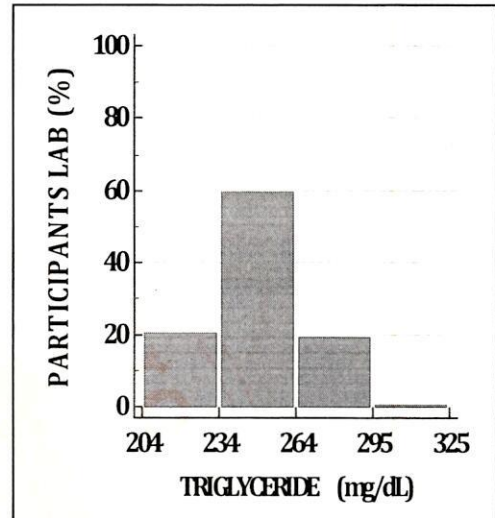
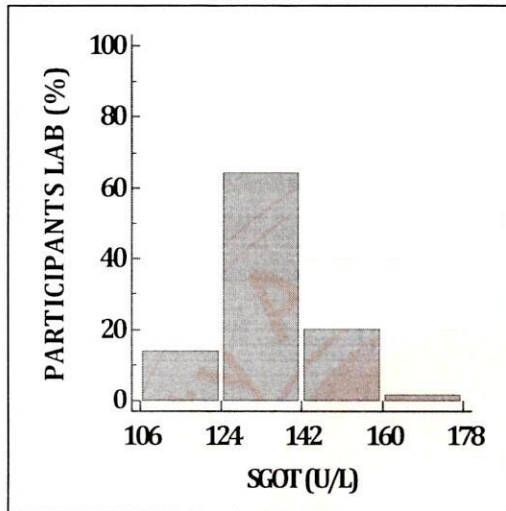


BIO-CHEMISTRY-01

GRAPHICAL REPORT

Cycle - 12/2023
Round- 8

Date: 31/08/2023





PC 1001

RML- Quality Assurance Program (RML-QAP)



Basic Biochemistry-01

ALL PARTICIPANTS COMPLETE DATA REPORT

Cycle - 12/2023Round No -08Date: 31/08/2023

Note:- This report is only for information about the participants performance in the particular round

Parameters	Total No. of Participants	No. of Responses	No of Participant Excluded from Robust Group Mean	No. of Participants Z Score b/w 0.0 - 2	No. of Participants Z Score b/w 2.1 - 2.9	No. of Participants Z Score >3
Albumin	296	220	18	192	10	18
Alkaline Phosphatase	296	212	8	189	15	8
Bilirubin Total	296	223	14	194	15	14
Calcium(Total)	296	199	22	165	12	22
Cholesterol (Total)	296	217	18	186	13	18
Creatinine	296	226	17	198	11	17
Glucose	296	229	18	201	10	18
HDL	296	199	2	191	6	2
Potassium	296	182	9	160	13	9
Protien (Total)	296	218	20	190	8	20
Sodium	296	182	11	162	9	11
SGPT/ALT	296	224	24	184	16	24
SGOT/AST	296	223	26	181	16	26
Triglyceride	296	216	12	185	19	12
Urea	296	224	22	188	14	22
Uric Acid	296	219	13	198	8	13

****End of Report****

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HEMATOLOGY

ALL METHOD REPORT

Cycle-12/2023

Round -4

Lab Code: 2432

Date: 31/08/2023

Complete Blood Count (CBC)

Parameters	No.of Participants	Robust Mean	Robust Standard deviation (SD)	Uncertainty of Assign Values	Range (± 2 SD)	Your Value	Z Score
Hb gm/dl	310	11.9	0.4	0.03	11.1-12.6	12.3	1.2
WBC $\times 10^3/\mu\text{l}$.	308	11.3	0.8	0.06	9.7-13.0	11.4	0.1
RBC $\times 10^6/\mu\text{l}$.	309	4.1	0.1	0.01	3.8-4.4	4.14	0.3
Hct%	309	36.1	2.6	0.18	31.0-41.2	33.7	-0.9
MCV fl.	308	87.7	4.9	0.35	77.9-97.5	81.3	-1.3
MCH pg.	308	28.9	1.0	0.07	26.9-30.8	29.6	0.7
MCHC gm/dl	308	32.9	2.0	0.14	28.8-36.9	36.4	1.7
Platelet $\times 10^3/\mu\text{l}$.	309	272.6	18.8	1.34	235.0-310.3	292	1.0

Interpretation of Z Score:

Z Score Value(+/-)	[Z] ≤ 2.0	$2.0 < [Z] < 3.0$	[Z] ≥ 3.0
Interpretation	Satisfactory Performance No signal	Questionable Warning Signal	Unsatisfactory Performance action Signal

Peripheral Blood Smear(PBS):

	Your Result	Consensus Result
DLC	P-60, L-37, E-01, Mono-02	P-47.7-68.4, L-23.9-45.9, E-1-3.6, Mono- 1.5-4.7
Morphology	RBCs show severe degree of Anisopoikilocytosis with predominant Cells being Microcytic Hypochromic. Few number of Pencil Cells, tear Drop Cells and Target Cells are noted. WBCs are within normal range. Platelets are adequate in number	Δ Microcytic/Microcytosis/Microcytes (276/288) Δ Hypochromia/ Hypochromic (259/288) Δ Anisocytosis (230/288) Δ Poikilocytosis (205/288) Δ Target Cells (176/288)
Diagnosis	Microcytic Hypochromic Anaemia	Microcytic Hypochromic Anemia

Legends	(*) Excluded From Group Mean	{ } Not Reported	(#)Late Result Submission	(\$)Reported in other Unit
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Chief Coordinator

Dr. Sanjay Mehrotra

Checked By:

Doc. No.: ASS / FR / 06 / R 01 / Dt.: 05.01.2022

End of Report

Programme Director

Dr. Bandana Mehrotra

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HEMATOLOGY

METHOD WISE REPORT

Cycle-12/2023

Round -4

Lab Code: 2432

Date: 31/08/2023

Note: Your lab is not the part of this Method Group

Complete Blood Count (CBC)

Parameters	Method Group	No.of Participants	Method Wise Robust Mean	Method Wise Robust Standard deviation (SD)	Method Wise Uncertainty of Assign Values	Method Wise Range (± 2 SD)	Your Value	Method Wise Z Score
Hb gm/dl	Photometric	181	11.8	0.4	0.04	11.0-12.6	-	-
WBC $\times 10^3/\mu\text{l}$.	Electrical impedance	167	11.3	0.7	0.07	10.0-12.7	-	-
RBC $\times 10^6/\mu\text{l}$.	Electrical impedance	183	4.1	0.1	0.01	3.8-4.4	-	-
Hct%	Calculated	176	36.0	2.3	0.22	31.4-40.7	-	-
MCV fl.	Calculated	135	87.4	4.6	0.50	78.1-96.6	-	-
MCH pg.	Calculated	187	28.7	1.0	0.09	26.8-30.7	-	-
MCHC gm/dl	Calculated	188	32.8	1.8	0.17	29.1-36.5	-	-
Platelet $\times 10^3/\mu\text{l}$.	Electrical impedance	177	272.7	17.4	1.64	237.8-307.6	-	-

Interpretation of Z Score:

Z Score Value(+/-)	$[Z] \leq 2.0$	$2.0 < [Z] < 3.0$	$[Z] \geq 3.0$
Interpretation	Satisfactory Performance No signal	Questionable Warning Signal	Unsatisfactory Performance action Signal

Legends	(*) Excluded From Group Mean	{,} Not Reported	(#)Late Result Submission	(\$)Reported in other Unit
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Chief Coordinator

Dr.Sanjay Mehrotra

Checked By:

Prepared By: S.M

Programme Director

Dr.Bandana Mehrotra

End of Report

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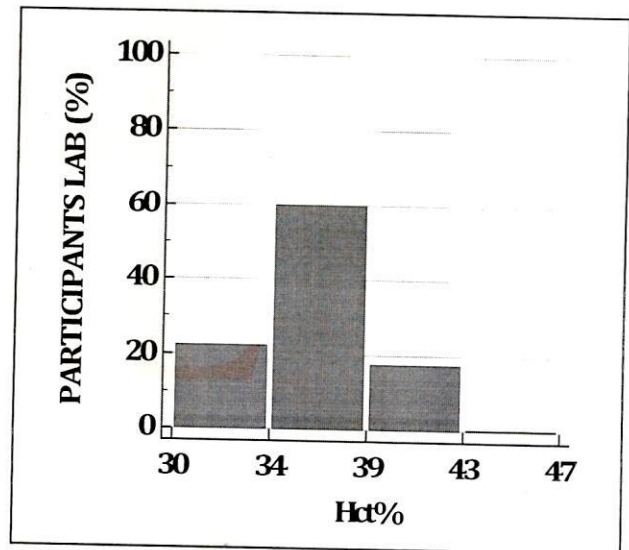
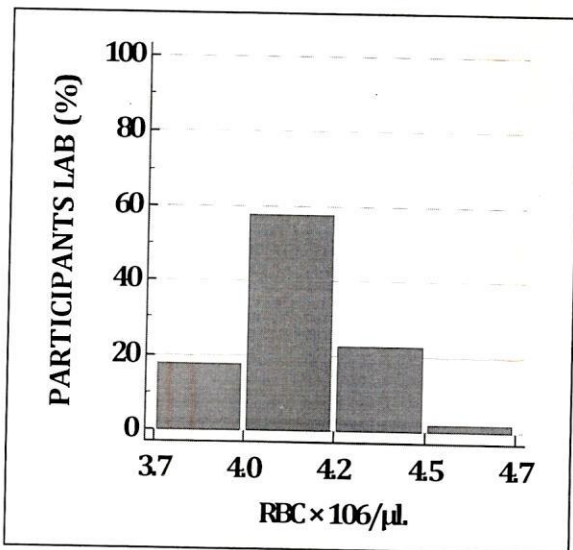
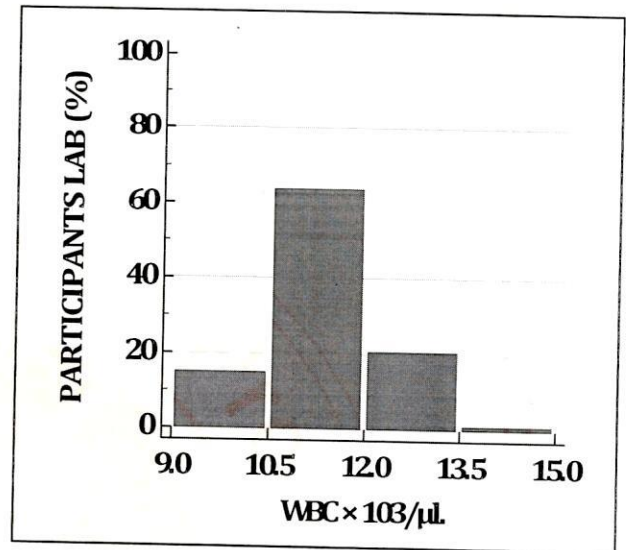
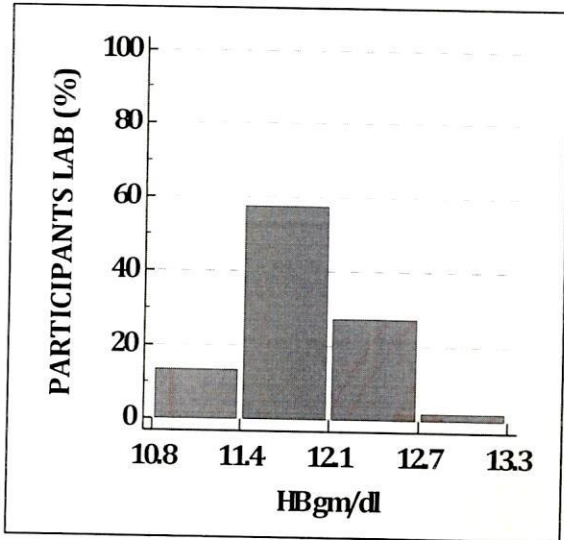
HEMATOLOGY

GRAPHICAL REPORT

Cycle - 12/2023

Round -4

Date: 31/08/2023



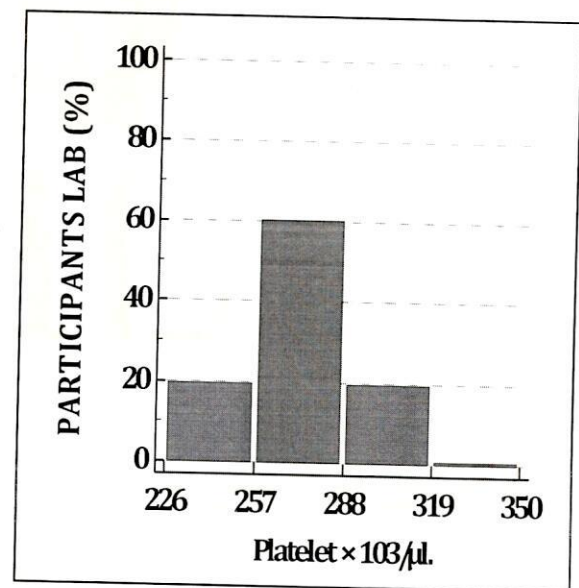
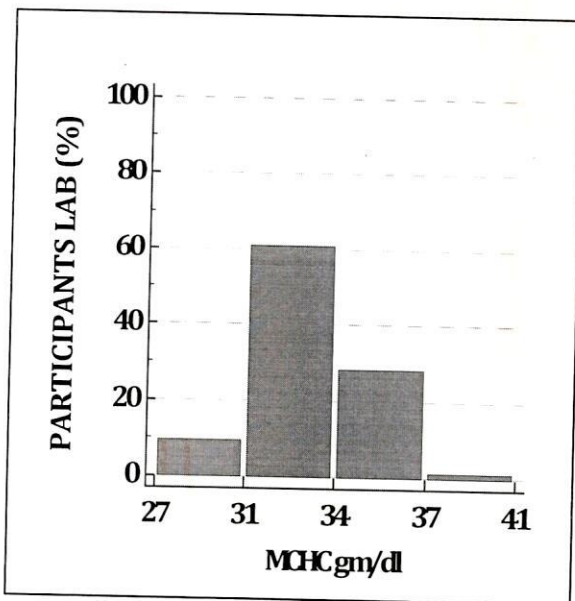
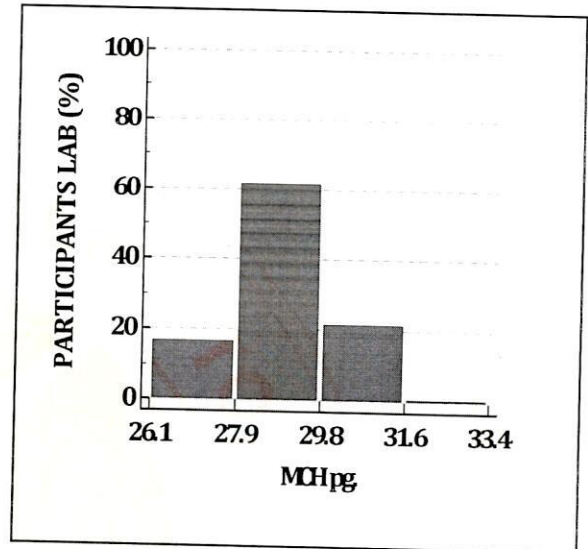
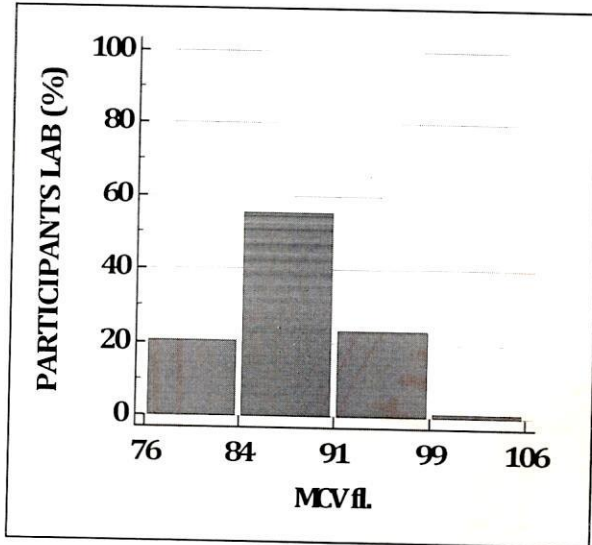
HEMATOLOGY

GRAPHICAL REPORT

Cycle - 12/2023

Round -4

Date: 31/08/2023





Hematology

ALL PARTICIPANTS COMPLETE DATA REPORT

Cycle - 12/2023

Round No - 4

Date: 31/08/2023

Note:- This report is only for information about the participant's performance in the particular round

Parameters	Total No. of Participants	No. of Responses	No of Participant Excluded from Robust Group Mean	No. of Participants Z Score b/w 0.0 - 2	No. of Participants Z Score b/w 2.1 - 2.9	No. of Participants Z Score >3
Hb gm/dl	414	310	40	255	15	40
WBC $\times 10^3/\mu\text{l}$.	414	308	89	205	15	88
RBC $\times 10^3/\mu\text{l}$.	414	309	34	253	22	34
HCT%	414	309	17	275	17	17
MCV fl.	414	308	2	298	8	2
MCH pg.	414	308	16	273	19	16
MCHC gm/dl	414	308	12	289	8	11
Platelet $\times 10^3/\mu\text{l}$.	414	309	20	268	21	20

****End of Report****

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RML- Quality Assurance Program (RML-QAP)



Urine Routine Analysis

ALL METHOD REPORT

Lab Code: 2432

Cycle - 12/2023
Round No -08

Date: 31/08/2023

Parameters	Units	No.of. Participants	Consensus		Consensus Result	Your Value	Remark
			Number	%			
Specific Gravity	-	340	285	84%	1.010-1.020	1.010	Within Consensus
pH	-	339	314	93%	6.0 - 7.0	7.0	Within Consensus
Leukocytes	/μl	332	239	72%	2+ - 3+	3+	Within Consensus
Nitrite	-	324	295	91%	Positive	Positive	Within Consensus
Protein	mg/dl	339	240	71%	2+ - 3+	2+	Within Consensus
Glucose	mg/dl	341	274	80%	3+ - 4+	3+	Within Consensus
Ketones	-	339	290	86%	1+ - 3+	1+	Within Consensus
Urobilinogen	mg/dl	336	255	76%	2+ - 3+	2+	Within Consensus
Bilirubin	mg/dl	335	272	81%	3+	3+	Within Consensus
Blood (Hemoglobin)	/μl	338	315	93%	3+ - 5+	3+	Within Consensus

Legends	≥ 60% Consensus	(*) Outside Consensus	(@) No Consensus	(.) Not Reported	(#)Late Result Submission
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Chief Coordinator

Dr.Sanjay Mehrotra

Checked By

Prepared By: SV

Programme Director

Dr.Bandana Mehrotra

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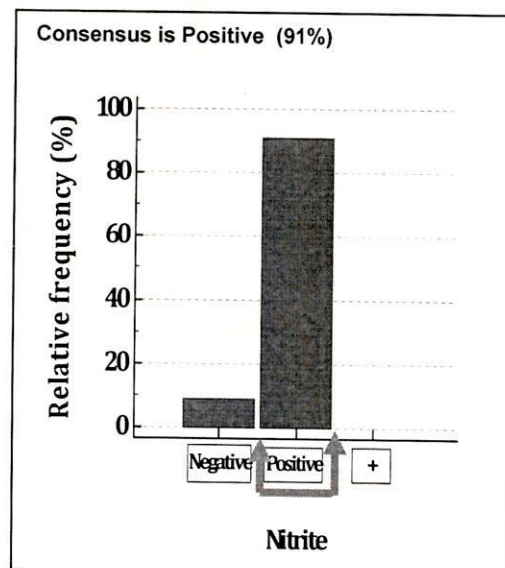
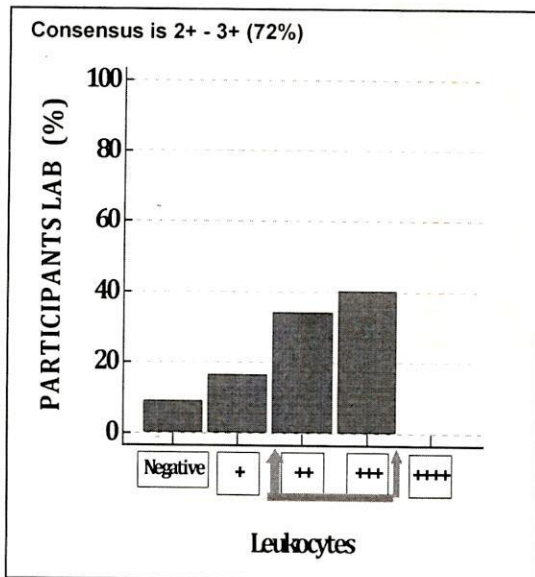
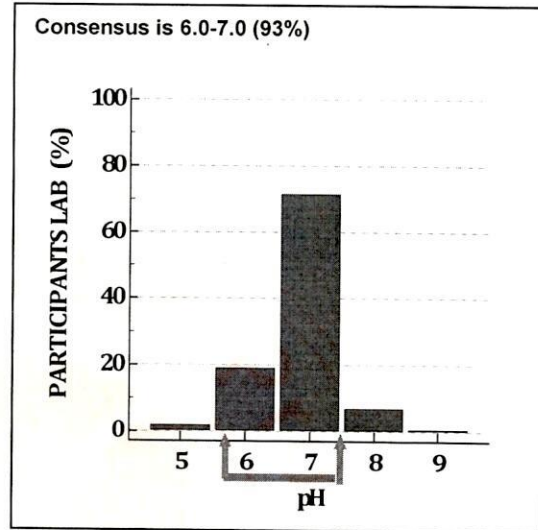
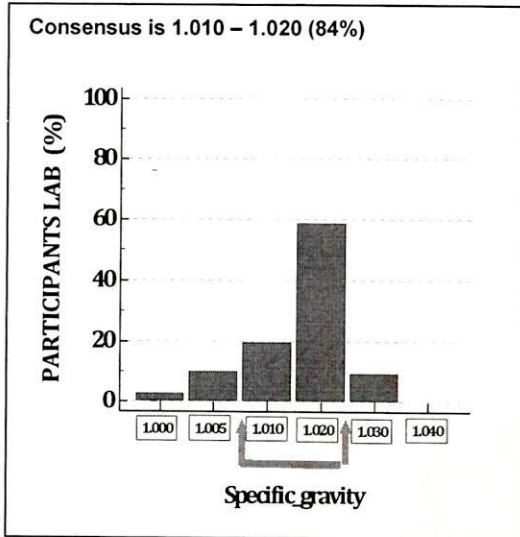
URINE ROUTINE ANALYSIS

GRAPHICAL REPORT

Cycle - 12/2023

Round-8

Date:31/08/2023



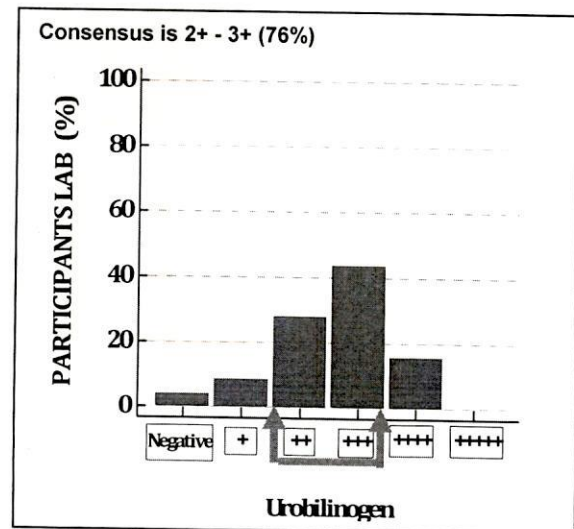
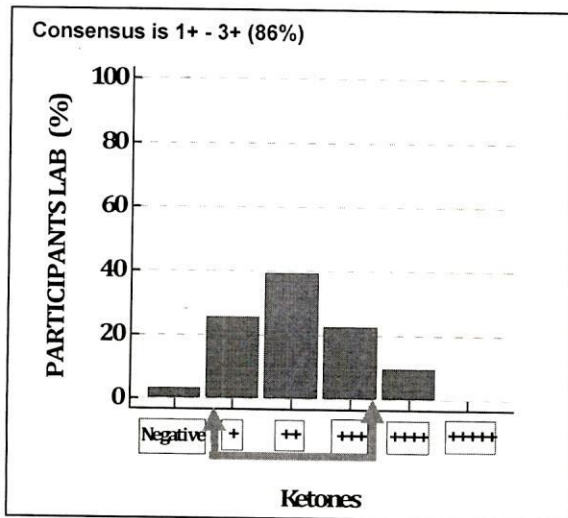
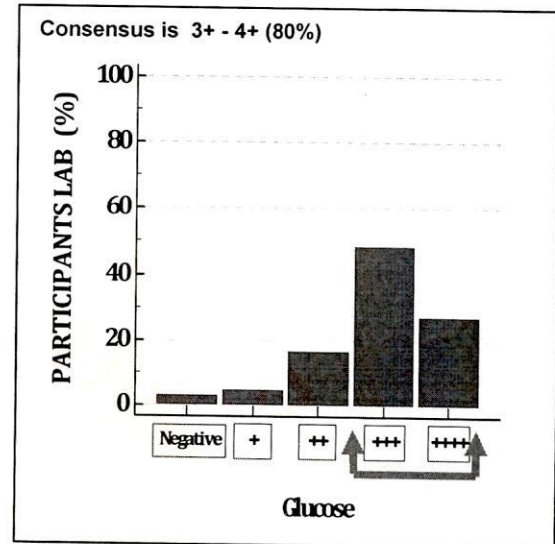
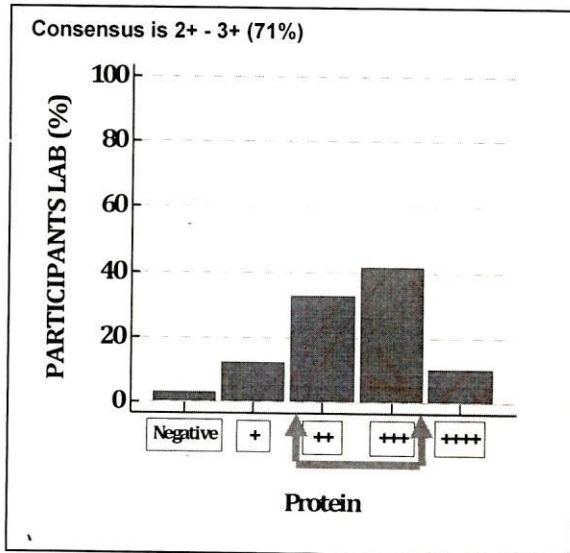
URINE ROUTINE ANALYSIS

GRAPHICAL REPORT

Cycle - 12/2023

Round-8

Date:31/08/2023



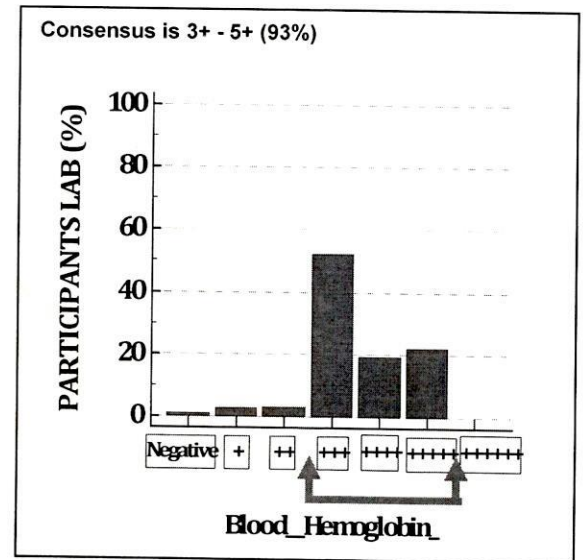
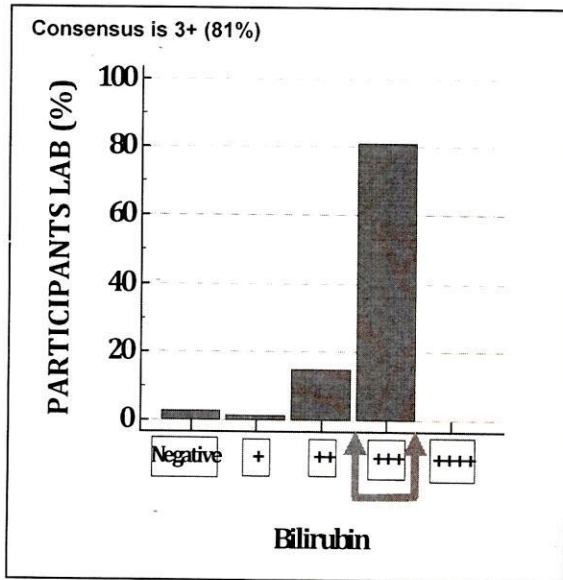
URINE ROUTINE ANALYSIS

GRAPHICAL REPORT

Cycle - 12/2023

Round-8

Date:31/08/2023





Lab Code No. **2432**

BASIC SEROLOGY FINAL RESULT ASSESSMENT

CYCLE NO. : 12

ROUND: 4

TOTAL PARTICIPANT: 475

DATE: 31/08/2023

Parameter	Total Responses	Your Result	All Lab Result	Consensus %	Remarks
S1- Anti HCV	-	-	-	-	-
S2- HBsAg	412	Negative	Positive : 82 Negative : 330	80%	Within Consensus

Legends:	(*) Excluded From Consensus Group	{NR} Not Reported	(#) Late Result Submission
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*Note: Consensus for S1-Anti HCV has not been reached, hence Parameter S1- Anti HCV for Round -4 stands deferred.

Chief Coordinator

Dr. Sanjay Mehrotra

Programme Director

Dr. Bandana Mehrotra

Checked By:

Prepared by: NT

End of Report