

**Chemical analysis of customs samples & their HS classification at Central Revenues  
Control Laboratory, (WCO-RCL), New Delhi, India  
(20.01.2025 to 31.01.2025)**

1 <sup>st</sup> Week		
Day	Time	Item
<b>Day-1</b>		
<b>Monday</b>	09.30-10.30	Inaugural Session <ul style="list-style-type: none"> <li>• Registration</li> <li>• Opening Ceremony</li> </ul>
	10.30-11.00	Photo Session / Tea
	11.00 -12.15	CRCL & its laboratories and their role in HS Classification
		<b>Module-1</b>
	12.15-13.30	<b>Theory Class:</b> Testing of Test parameters of Mineral fuel oil –Ash, Inorganic Acidity, Sediment, water, Copper Corrosion, Flashpoint, Kinematic Viscosity, Aniline point, pour point, Sulphur content, GCV, distillation, aromatic content
	13.30-14.30	Lunch
	14.30-15.45	<b>Experimental Segment</b> Test parameters- Ash, Inorganic Acidity Sediment, water
	15.45-16.00	Tea
	16.00-18.00	<b>Experimental Segment: Continue...</b> Test parameters- Copper Corrosion, Flashpoint, Kinematic Viscosity,
<b>Day-2</b>		
<b>Tuesday</b>	09.30-10.45	<b>Experimental Segment:</b> Aniline point, pour point
	10.45-11.00	Tea
	11.00 -13.30	<b>Experimental Segment:</b> Sulphur content, by ED-XRF
	13.30-14.30	Lunch
	14.30-15.45	<b>Experimental Segment:</b> Gross Calorific Value (GCV) by Automatic Bomb Calorimeter
	15.45-16.00	Tea
	16.00-18.00	<b>Experimental Segment:</b> Distillation by Automatic Distillation Unit (ADU), Aromatic content
<b>Day-3</b>		
		<b>Module-2 :</b>
	09.30-10.45	<b>Theory Class:</b>

<b>Wednesday</b>		Analysis of Solid fuel (Coal, Coke & Petroleum Coke) Moisture, Ash Content, Volatile matter (dmmf basis), GCV (mmf basis), Sulphur content, & Nitric acid correction factor
	10.45-11.00	Tea
	11.00 -13.30	<b>Experimental Segment:</b> Moisture, Ash Content-by TGA
	13.30-14.30	Lunch
	14.30 -15.45.	<b>Experimental Segment:</b> Volatile matter (dmmf basis)-by TGA
	15.45-16.00	Tea
	16.00 -18.00	<b>Experimental Segment:</b> GCV (mmf basis)- Automatic Bomb Calorimeter
<b>Day-4</b>	<b>Time</b>	<b>Item</b>
<b>Thursday</b>	09.30-10.45	Experimental Segment: Sulphur content by EDF-XRF
	10.45-11.00	Tea
	11.00 -12.15	<b>Experimental Segment:</b> Continue...
	12.15-13.30	<b>Experimental Segment:</b> Nitric acid correction factor
	13.30-14.30	Lunch
	14.30-15.45	<b>Experimental Segment:</b> Continue...
	15.45-16.00	Tea
	17.00-18.00	Calculation, interpretation, discussion and conclusion of results thereby Classification of Coal by Rank/Grade
<b>Day-5</b>	<b>Time</b>	<b>Item</b>
		<b>Module-3</b>
<b>Friday</b>	09.30-10.45	<b>Theory Class</b> An overview of Chapter 25
	10.45-11.00	Tea
	11.00 -13.30	<b>Experimental Segment :</b> Characterization of Nature of Calcium Carbonate (whether Natural or Synthetic) by ED-XRF, XRD and SEM-EDX
	13.30-14.30	Lunch
	14.30 -15.45	<b>Experimental Segment:</b> Quantification of iron content in iron ore samples by ED-XRF
	15.45-16.00	Tea
	16.00-18.00	<b>Experimental Segment:</b> Continue...
Saturday		<b>Study Tour at Agra</b>
		<b>SUNDAY</b>
<b>2<sup>nd</sup> Week</b>		

Day-6	Time	Item
		<b>Module-4</b>
<b>Monday</b>	09.30-10.45	<b>Class Room</b> Quantification of Gold Content, platinum and other associated impurities in Gold dore samples
	10.45-11.00	Tea
	11.00 -13.30	<b>Experimental Segment:</b> Determination of Gold Content by Fire Assay & Gravimetric method in Gold dore samples
	13.30-14.30	Lunch
	14.30 -15.45	<b>Experimental Segment:</b> Continue...
	15.45-16.00	Tea
	16.00-18.00	<b>Experimental Segment:</b> Continue...
Day-7	Item	Item
		<b>Module -4 continue...</b>
<b>Tuesday</b>	09.30-10.45	<b>Experimental Segment:</b> Determination of Platinum and other associated impurities in Gold dore samples by ICP-MS and AAS
	10.45-11.00	Tea
	11.00-13.30	<b>Experimental Segment:</b> Continue...
	13.30-14.30	Lunch
	14.30 -15.45	<b>Experimental Segment:</b> Continue...
	15.45-16.00	Tea
	16.00-18.00	Tea
Day-8	Time	Item
		<b>Module-05</b>
<b>Wednesday</b>	09.30-10.45	<b>Class Room</b> i. Identification of Coating in textile samples by SEM-EDX ii. Determination of 24 Banned Amines in textiles and textile products by HPLC
	10.45-11.00	Tea
	11.00 -13.30	<b>Experimental Segment:</b> Identification of Coating in textile samples by SEM-EDX
	13.30-14.30	Lunch
	14.30 -15.45	<b>Experimental Segment:</b> Determination of 24 Banned Amines in textiles and textile products by HPLC
	15.45-16.00	Tea
	16.00-18.00	<b>Experimental Segment:</b> Continue...
Day-9	Time	Item
		<b>Module-6</b>
<b>Thursday</b>	09.30-10.45	<b>Class Room</b> Qualitative and Quantitative analysis of active ingredients of pharmaceutical drugs (Ampicillin, Amoxicillin & Ciprofloxacin) by HPLC
	10.45-11.00	Tea

	11.00 -13.30	<b>Experimental Segment:</b> Qualitative and Quantitative analysis of active ingredients of pharmaceutical drugs (Ampicillin, Amoxicillin & Ciprofloxacin) by HPLC
	13.30-14.30	Lunch
	14.30 -15.45	<b>Experimental Segment:</b> Continue...
	15.45-16.00	Tea
	16.00-18.00	<b>Experimental Segment:</b> Continue...
<b>Day-10</b>	<b>Time</b>	<b>Item</b>
		<b>Module-7</b>
<b>Friday</b>	09.30 -10.45	<b>Class Room</b> Pyrolysis GC-MS: Principal, instrumentation and its application in the testing of plastic samples
	10.45-11.00	Tea
	11.00-13.30	<b>Experimental Segment</b> Identification and Characterisation of plastic samples by pyrolysis GC-MS
	13.30-14.30	Lunch
	14.30-15.45	<b>Experimental Segment:</b> Continue...
	15.45-16.00	Tea Break
	16.00-18.00	<ul style="list-style-type: none"> <li>• Case studies presented on various classification issues.</li> <li>• Discussion of the classification issues submitted (beforehand) and presented by the participants</li> <li>• Evaluation and Certificates.</li> </ul> Closing Ceremony

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