## SYLLABUS FOR RINL-VSP MT(T) WRITTEN TEST - 2015

(Indicative but not exhaustive)

	APTITUDE	
	Deductive Logic	
	Inductive Logic	
1 Logical Reasoning	Conceptualization	
	Puzzles	
	Venn Diagram	
	Percentages & Averages	
	Profit,Loss & Discount	
	Ratio and Proportion	
2 Numerical	Stocks and Shares	
	Simple Interest & Compound Interest	
	Time, work and distance	
	Permutations & Combinations	
3 Verbal	Articles	
	Prepositions	
	Reading Comprehension	
	Synonyms	
	GK	
4 General awareness	Current Affairs	
	History	

DISCIPLINE	
1 Chemical	Chemical Reaction Engineering
	Chemical Engineering Thermo Dynamics
	Heat Transfer
	Mass Transfer
	Momentum Transfer and Mechanical
	Operations
	Polymer Synthesis
	Polymer Technology
	Polymer Testing

	Air Pollution
	Concrete Structure
	Foundation Engineering
	Hydrology
	Irrigation
2 Civil Engg	Mechanics
	Municiple Solid Waste
	Noise Pollution
	Soil Mechanics
	Steel Structure
	Structural Analysis
	Surveying
	Water Requirements
	Fluid Mechanics and Hydraulics

3 Computer Science	Computer Organization
	Data Structures
	Database
	Digital Electronics
	Networking
	OS Fundamentals
	OSI Layer
	Programming language/C++
	Programming language/OO

(PTO)

4 Ceramic	Refractory-General characteristics
	Classification of Refractories
	Insulating Refractories
	Monolithics
	Raw Materials used in Refractories
	Testing of Refractories
	Material Science and Technology
	Heat Transfer, Heat balance and Phase Diagram
	Fuels and Furnace in Ceramic Industry
	Properties, types of Cements and their usage
	Different treatments of glass and processes of manufacturing of glass
	Potteries

5 Electrical	Analog and Digital Electronics
	Control Systems
	Electric Circuits and Feilds
	Electrical and Electronic Measurements
	Electrical Machines
	Power Electronics and Drives
	Power Systems
	Signals and Systems

6 Electronics	Electronics Analog electronics
	Computers and Microprocessors
	Control Systems
	Digital Electronics
	Electrical and Electronic Measurements
	Industrial Electronics
	Network Theory
	Semiconductor Devices

	Environmental Chemistry
	Environmental Biology & Ecology
	Air Pollution and its control
	Environmental Microbiology
	Environmental Hydraulics
	Design of Air Pollution Control Systems
	Instrument methods for Env. Analysis
7 Environmental Engineering	Industrial Waste Water Treatment Systems
	Solid waste Management
	Remote sensing and GIS
	Environmental Policy & Legislation
	Environment Impact Assessment
	Environment System Optimization & Modeling
	Hazardous & Bio medical waste management
	Environmental Economics

8 Instrumentation	Analog Electronics
	Analytical, optical and Biomedical
	Instrumentation
	Basic of circuits and Measurement System
	Communications
	Control Systems and Process Control
	Digital Electronics
	Electrical and Electronic Measurements
	Signal and Systems
	Transducers, Mechanical Measurement and Indus inst

	Computer Integrated Manufacturing
	Design
	Engineering Materials
	Engineering Mechanics
	Fluid Machines
	Fluid Mechanics
	Inventory Control
	Machine Design
	Machining and Machine Tool Operations
	Management Information System
9 Mechanical	Metrology and Inspection
	Product design and Development
	Production planning and Control
	Strength of Materials
	Theory of Machines
	Thermodynamics
	Vibrations
	Enegry conservation
	Heat Transfer
	Operations Research
	Industry Safety

10 Metallurgy	Extractive Metallurgy
	Foundry technology
	General metallurgy
	Material science
	Mechanical metallurgy
	Physical metallurgy
	Welding and Corrosion

	Safety Management and Accident Prevention
	Planning and Organising for Safety
	Behavioural Safety
	Safety Training
11 Safety	Safety Engineering
	Fire - Explosion - Toxicity & Risk Assesment
	HIRA - Accident Investigation & Safety Performance
	Personal Protective Equipements
	Standards and Statues in Safety
	Industrial Hygiene & Occupational Health
	Industrial Safety

[PTO for MT(HR) Syllabus]

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	Puzzles
	Venn Diagram
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	Stocks and Shares
	Simple Interest & Compound Interest
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4 General awareness	GK
	Current Affairs
	History

DISCIPLINE		
HR	Labour Laws	
	Industrial Relations including Trade Unions	
	Human Resource Planning & Recruitment	
	Performance Management	
	Collective Bargaining and Negotiation Process	
	Grievance Management	
	Human Resource Development including Training	