

General Aptitude
Indicative Syllabus
<ul style="list-style-type: none"> • General Knowledge: Current Affairs/Events, General Science, History, Geography, Political Science, Date, Famous Place, Famous Personality, etc • English: Synonyms, Antonyms, Fill in the Blank, Correct Spelling, Gender, Singular & Plural, Idioms & Phrase, One word Substitution, Logical Sequence, etc • Quantitative Aptitude: Simplification, Fraction, LCM/HCF, Number System, Average, Simple Interest, Compound Interest, Percentage, Profit & Loss, Allegation & Mixture, etc • Reasoning: Classification/ Series, Blood Relation, Position/Direction/Distance, Coding-Decoding, Ranking Arrangement, Diagrammatic Reasoning, etc

Name of Discipline: <i>Mining Overman</i>
Indicative Syllabus
<ul style="list-style-type: none"> • Mine Management, Legislation and General Safety • Mine Development, Mining Methods and Surveying • Mining Machineries and Mine Electrical • Surface Environment and Hazards • Mining Operations • Mine Reclamation • Writing of reports • Drilling and Blasting practices in mines • Explosive Management • Environment Management

Name of Discipline: <i>Magazine In-charge</i>
Indicative Syllabus
<ul style="list-style-type: none"> • Methods of working • Mine Management, Legislation and General Safety • Drilling and Blasting practices in mines • Magazine management • Legislations concerning explosives, and receipt, storage, handling, issue and transport of explosives • Writing of reports

Name of Discipline: ***Vocational Training Instructor***

Indicative Syllabus

- Mine Management, Legislation and General Safety
- Mine Development, Mining Methods and Surveying
- Mining Machineries and Mine Electrical
- Surface Environment and Hazards
- Mining Operations
- Mine Reclamation
- Writing of reports

Name of Discipline: ***Junior Mine Surveyor***

Indicative Syllabus

- Linear and Angular Measurements.
- Area & Volume calculations
- Theodolite traversing, Levelling
- Trigonometry & Rectangular Co-ordinate calculations
- True North determination
- Triangulation
- Topographic Survey
- Tacheometry Survey
- Survey Adjustments & Theory of Errors
- Contouring
- Opencast Mine Surveys
- Surveys for Construction and Development Purpose
- Dip, Strike and Fault Problems
- Coal Heap Measurement
- Overburden Measurement
- Total Station, DGPS, 3DTLS & Drone surveying in Opencast Mines
- Application of Computers & Software in Mine Surveying (SURPAC, LISCAD etc.)
- Elementary Knowledge in –Remote Sensing & GIS, Geomatics.
- Mine Management, Legislation and General Safety
- Method of Mining
- Writing of reports

Name of Discipline: ***Mining Sirdar***

Indicative Syllabus

- Mine Management, Legislation and General Safety
- Examination of Sumps
- Shot-firing and transport and use of explosives in mines
- Preliminary knowledge of Mine Reclamation
- Preliminary knowledge of Safety Management Plan
- Writing of reports

Name of Discipline: ***Mechanical Supervisor***

Indicative Syllabus

- Manufacturing Technology
- Metrology and Quality Control
- Fluid Mechanics and Hydraulic Machinery
- Thermal Engineering
- Refrigeration and Airconditioning
- Strength of Material
- Theory of Machines and Mechanisms
- Design of Machine Elements
- Industrial Engineering and Management
- Basic Electrical Engineering
- Mining machinery, maintenance, and service
- Mine legislation
- Operation of mechanical tools
- Mechanical Assembly
- Writing of reports

Name of Discipline: ***Electrical Supervisor***

Indicative Syllabus

- Electrical & Electronics Engineering
- Digital Electronics
- Electronic Devices and Circuits
- Electrical and Electronic Measuring Instruments
- Electrical Circuits
- DC Machines and Batteries
- AC Machines
- Basic Mechanical Engineering
- Electrical Power Systems
- Switchgear and Protection
- Electrical Estimation and Utilization
- Power Generation & Transmission
- Mining Machinery
- Mine Legislation
- Writing of reports