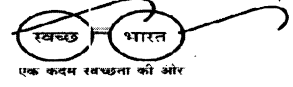


नॉदर्न कोलफील्ड्स लिमिटेड
(मिनिरातना कंपनी)
(कोल इण्डिया लिमिटेड की अनुषंगी कंपनी)



Northern Coalfields Limited
(AMiniratna Company)
(A subsidiary of Coal India Limited)

Recruitment Department



CIN- U10102MP1985GOI003160

An ISO: 9001, ISO: 14001 & OHSAS: 18001 Certified Company

पोस्ट- सिंगरौली कोलियरी, जिला- सिंगरौली, म. प्र., पिन 486889/ Post- Singrauli Colliery, Distt- Singrauli, M.P. PIN-486889
Phone: 07805- 266808, (FAX) 266640 email: rectt.ncl@coalindia.in website : www.nclcil.in

पत्रांक: एनसीएल/सिंग/श्रमशक्ति एवं भर्ती/2020/E-60

दिनांक : 03.10.2020

सूचना/Notice

Regarding: Publication of Syllabus of Statutory Posts-Mining.

In reference to the employment notification ref no:145 dated 07/02/2020 for filling the post of Mining Sirdar T& S Grade-C and Surveyor T & S Grade-B through direct recruitment, syllabus for written test is hereby enclosed with this notice for all concerned.

माइनिंग सरदार टी एंड एस ग्रेड सी एवं सर्वेयर टी एंड एस ग्रेड बी के पदों की रिक्तियों को सीधी भर्ती के माध्यम से भरने हेतु निर्गत रोजगार अधिसूचना संदर्भ संख्या: 145 दिनांकित 07.02.2020 के संदर्भ में आयोजित होने वाली लिखित परीक्षा की विषय वस्तु इस सूचना के साथ सभी संबंधितों के सूचनार्थ संलग्न की जा रही है।

(डायरेक्टर)
महाराष्ट्र (मिनिक), नॉदर्न कोलफील्ड्स लिमिटेड

Notification No 145 dated 07.02.2020 (Statutory Posts – Mines)

Post Name: Mining Sirdar T&S Gr. C

Section A

(1-70 questions, MCQ of one mark each)-70 Marks

(1-70 प्रश्न, 70 वस्तुनिष्ठ प्रश्न प्रत्येक 1 अंक का) -70 अंक

70 questions from assessing Technical domain knowledge the syllabus will be as follows:

1. Opencast coal mine working; bench formation, dump management and haul road design.
 2. Shotfiring and transport and use of explosives in mines.
 3. Safety issues in opencast workings, transport of material, working at heights, marching and deployment of heavy machines etc.
 4. Preliminary idea about reclamation operation in opencast mining.
 5. Preliminary understanding about safety management plan.
 6. Provisions of the Coal Mines Regulations, 2017, Rules and Bye-laws made under the Mines Act, 1952, relating to the safety of persons employed in Mines in general and to the duties of Sirdars and Shotfirer's in particular.
 7. Writing of reports.
- Etc. as per the courses offered by the Recognized Institutes.

Post Name : Mine Surveyor T&S Gr. B

Section A

(1-70 questions, MCQ of one mark each)-70 Marks

(1-70 प्रश्न, 70 वस्तुनिष्ठ प्रश्न प्रत्येक 1 अंक का) -70 अंक

70 questions from assessing Technical domain knowledge the syllabus will be as follows:

1. Linear Measurement: Instruments for measuring distance ranging; chain surveying; errors in Chaining and plotting; Optical Square.
2. EDM: Principles of measurement; types; correction and selection of instruments.
3. Angular Measurement: Prismatic Compass; bearing of lines; Local Attraction; Magnetic Declination.
4. Plan Table Surveying: Methods Contouring using plain table and micro-optic alidade.
5. Miners' dials and other compass instruments: dialing; loose and fast needle surveying.
6. Theodolite: Modern Micro-Optic theodolite; Measurement of Horizontal and vertical angles; theodolite traversing; traverse calculation; computation of co-ordinates; adjustment of traverse; temporary and permanent adjustment.
7. Total Stations; Surveying by total stations, errors, adjustments, and applications.
8. Leveling: Leveling Instrument; types of leveling; booking and reduction methods; temporary and permanent adjustment of levels; geometrical, trigonometric and physical leveling; characteristics and uses of contours; method of contouring; traverse; co-ordinates and leveling problems.
9. Tachometry
10. Controlled surveys: Triangulation; Trilateration; application of GPS and total station in mine surveying.
11. Use, Care, Testing and adjustments of instruments.
12. Field astronomy: Astronomical terms; determination of true bearing by equal altitude method; Gyro Theodolite; Principles and determination of Gyro north, astronomical

Trainagle; conversion of time systems and precise determination of azimuth by astronomical methods.

13. National Grid: Map Projections Cassini Lambert's polyconic and universal transfers Mercator; Transformation of Coordinates, vertical projections; mine models.
14. Geodesy: Geode, Spheroid and ellipsoid, geo centric, geodetic and astronomical coordinates orthometric and dynamic heights.
15. Photogrammetry: Introduction; Scale of a vertical photograph; Photographs Vs Maps; Application of Photogrammetry and remote sensing in Mining.
16. Theory of errors and adjustments: Causes and classification of errors; Inclines of precision; laws of weight propagation and adjustments of errors; adjustments of triangulation figures.
17. Traversing along steep topography with or without auxiliary telescope. Traversing along steeptopography with or without auxiliary telescope.
18. Area and volume calculation; different methods and their limitations: earth work and building estimation; laying out of rain and haul road curves; determination of azimuth latitude and longitude.
19. Borehole surveying and calculations, dip, strike, outcrop and fault problems.
20. Types of plans for opencast workings, their preparation, care, storage and preservation: Legislation concerning mine plans and sections; duties and responsibilities of surveyors.
21. Geological map reading.
22. Application of computers in mine surveying and preparation of mine plan, 3D laser profiling of surfaces and bench/ slopes.
23. Profiling of benches, high wall, dumps.
24. Dump/High wall stability monitoring using different instruments like laser scanner/continuous real time monitor.

Etc. as per the courses offered by the Recognized Institutes

Section B

(1-30 questions, MCQ of one mark each)-30 Marks

(1-30 प्रश्न, 30 वस्तुनिष्ठ प्रश्न प्रत्येक 1 अंक का) -30 अंक

questions from assessing the Mental ability & Mental aptitude, the syllabus is as follows:

This section is common for all Posts, will carry 30 questions belonging to/ यह अनुभाग सभी पदों के लिए समान है, जिसमें 30 प्रश्न होंगे:

I. General Knowledge –About India and its international relations, General Science etc/ सामान्य ज्ञान -भारत और उसके अंतरराष्ट्रीय संबंध, सामान्य विज्ञान आदि

II. General Awareness – About Sports, Defense, Books, Prizes, About Indian democracy, etc./ सामान्य जागरूकता - खेल, रक्षा, पुस्तकें, पुरस्कार, भारतीय लोकतंत्र के बारे में, आदि।

III. Reasoning, Verbal & Mental Ability – Synonym & Antonym (Hindi/English), Grammar, Relationship etc./ तर्क, मौखिक और मानसिक क्षमता, पर्याय और विलोम (हिंदी/अंग्रेजी), व्याकरण, संबंध इत्यादि।

IV. Quantitative aptitude – Work relationship, Profit & Loss, Speed etc. / क्वांटिटेटिव एप्टीट्यूड - वर्क रिलेशनशिप, लाभ एवं हानि, गति इत्यादि।