

Examination for selection to the post of **Foreman** in Kerala Ceramics
Limited

Category No.380/2024

Total: 100 Marks

Sl. No	Module Title	Module Contents	Marks
1.	General Safety & Legislation	Duties and responsibilities of workmen, competent persons and officials given in MMR 1961; Mine Working, Mine Gases; Mine Plans; Mine Surveying; Workmen Inspectors; Pit Safety Committee; Welfare amenities - Canteen, Rest shelters and First-aid.	10
2.	Accidents and Dangerous Occurrences	Dangerous occurrences in mines and dealing with the same; Mine Accidents - Types, their causes and preventions; Accident reports; not disturbing the place of accident.	10
3.	Occupational Health and Rescue	Mine Rescue; physiological effect of mine gases; rescue equipment and First Aid. Sanitation and health; miners' diseases, their symptoms and preventions. Occupational health survey in mines.	10
4.	Mine Hazards	Hazard Identification. Risk Identification and Risk Assessment; Safety Audit in Mines. Safety Management Plan. Disaster Management and Emergency Preparedness Plan.	10
5.	Mining Geology	Rock formation - types and mode of occurrence; Occurrence of Metalliferous deposits; Geological Disturbances; Dangers and precautionary measures while approaching geological disturbances areas.	10
6.	Mining Methods	Surface and Underground mining methods - Types, Characteristics, Limitations, Applications, Advantages and Disadvantages. General principles of stope development and drifting method.	10
7.	Mine Construction and Development	Mode of entry in the mines - Shaft Sinking, Incline, Decline, Adit; Box cut - types, influencing parameters and location. Ultimate pit limits; Haul roads and ramps. Waste dumps and Ore stockpiles - method of formation with safety precautions.	10
8.	Explosives and Blasting	Type of Explosives and its applications, Type of Initiating systems and accessories; Misfires; Storage, Transportation and handling of explosives; Danger zone; Environmental impacts due to blasting - ground vibration, fly rock, air blast, and dust pollution.	10

9.	Mining Machinery	Kinds of machinery used for loading, haulage and transport in mines; Application of electricity in mines; Winning equipments & Types of pumps. Safety devices in the mining machinery.	10
10.	Mine Environment	Environmental Compliances, Ventilation of headings and sinking shafts. Maintenance of ventilation appliances & Mine gases. Sampling and analysis of mine dust. Precautions against air pollution and water pollution. Fire & inundation.	10

NOTE: - It may be noted that apart from the topics detailed above, questions from other topics prescribed for the educational qualification of the post may also appear in the question paper. There is no undertaking that all the topics above may be covered in the question paper.