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REFERENCE SYLLABUS

For

Refrigeration Plant Operator - Ammonia



REFRIGERATION PLANT OPERATOR Ammonia

SYLLABUS

Introduct on

This Syllabus is intended to assist candidates studying for the Refrigeration Plant OperatoAmmonian Examination.

Recommended Study Program:

It is recommended that, before undertaking this examination, the candidate completes Power Engineering Course of study, offered through a recognized and approved technical institute or training provider which addresses the Syllabus Outline.



REFRIGERATION PLANT OPERATOR Ammonia

SYLLABUS

Reference Syllabus for Refrigeration Plant Operator - Ammonia

Major Topic: **Acts, Regulations, and Codes**

Topic 1 Boiler and Pressure Vessels Act

Topic 2 Introduction to Codes for Boilers

Topic 3 Introduction to Plant Safety

Topic 4 Refrigeration Plant Safety

Major Topic: **Basic Communication**

Topic 1 Technical Communications

Topic 2 Plant Communications

Major Topic: **Elementary Science**

Topic 1 SI Units

Topic 2 Basic Arithmetic Operations

Topic 3 Transposition

Topic 4 Areas and Volumes of Solids

Topic 5 Application of Basic Mechanics

Topic 6 Introduction to Thermodynamics

Topic 7 Introduction to Matter and Chemistry

Topic 8 Introduction to Electricity

Major Topic: **Safety**

Topic 1 Fire Safety and Site Hazards

Topic 2 Building Safety

Major Topic: **Environmental**

Topic 1 Gas Detection and Monitoring

Topic 2 Environmental Impact of Refrigerants



REFRIGERATION PLANT OPERATOR Ammonia

SYLLABUS

Major Topic: Principles of Refrigeration

Topic 1 Applied Thermodynamics

Topic 2 Refrigerants

Topic 3 Basic Refrigeration Cycles

Major Topic: Refrigeration Equipment and Components

Topic 1 Refrigeration Compressors

Topic 2 Oil Separators

Topic 3 Compressor Lubrication

Topic 4 Condensers

Topic 5 Cooling Towers

Topic 6 Evaporators

Topic 7 Metering Devices

Topic 8 Cooling Coils

Major Topic: Refrigeration Controls and Instrumentation

Topic 1 Fundamentals Measuring Devices

Topic 2 Basic Operational Controls

Topic 3 Basic Safety Controls

Major Topic: Refrigeration System Operation and Maintenance

Topic 1 Checks

Topic 2 Safety Devices and Functions

Topic 3 Troubleshooting

Topic 4 Procedures