

“SCHEDULE

S. No.	Section or rule under which competency is recognized	Qualification required	Experience for the purpose	Facilities at his command
1	2	3	4	5
1.	Rules made under section 6 and section 112 – Certificate of stability for buildings	Degree in Civil or Structural Engineering; or equivalent.	(i) A minimum of 10 years’ experience in the design of construction or testing or repairs of structures; (ii) Knowledge of non-destructive testing, various codes of practice that are current and the effect of the vibrations and natural forces on the stability of the building; and (iii) Ability to arrive at a reliable conclusion with regard to the safety of the structure or the buildings.	
2.	Rules made under section 21(2) – “Dangerous Machines”	Degree in Electrical or Mechanical or Textile Engineering or equivalent.	(i) A minimum of 7 years’ experience in- (a) design or operation or maintenance; or (b) testing, examination and inspection of relevant machinery, their guards, safety devices and appliances. (ii) He shall – (a) be conversant with safety devices and their proper functioning; (b) be able to identify defects and any other cause leading to failure; and (c) have ability to arrive at a reliable conclusion with regard to the proper functioning of safety device and appliance and machine guard.	Gauges for measurement; instruments for measurement of speed and any other equipment or device to determine the safety in the use of the dangerous machines.
3.	Section 28 – Lifts and Hoists	A degree in Electrical and /or Mechanical Engineering or	(i) A minimum experience of 7 years’ in- (a) design or erection or maintenance; or (b) inspection and test	Facilities for load testing, tensile testing, gauges equipment/ gadget for

		its equivalent.	<p>procedures of lifts and hoists;</p> <p>(ii) He shall be –</p> <p>(a) Conversant with relevant codes of practices and test procedure that are current;</p> <p>(b) Conversant with other statutory requirements covering the safety of the Hoists and Lifts;</p> <p>(c) able to identify defects and arrive at a reliable conclusion with regard to the safety of Hoists and Lifts.</p>	measurement and any other equipment required for determining the safe working conditions of Hoists and Lifts.
4.	Section 29 – Lifting Machinery and Lifting Tackles	Degree in Mechanical or Electrical or Metallurgical Engineering or its equivalent.	<p>(i) A minimum experience of 7 years' in-</p> <p>(a) design or erection or maintenance; or</p> <p>(b) testing, examination and inspection, of lifting machinery, chains, ropes and lifting tackles.</p> <p>(ii) He shall be –</p> <p>(a) Conversant with the relevant codes of practices and test procedures that are current;</p> <p>(b) Conversant with fracture mechanics and metallurgy of the material of construction;</p> <p>(c) Conversant with heat treatment/ stress relieving techniques as applicable to stress bearing components and parts of lifting machinery and lifting tackles;</p> <p>(d) capable of identifying defects and arriving at a reliable conclusion with regard to the safety of lifting machinery, chains, ropes, and lifting tackles.</p>	Facilities for load testing, tensile testing, heat treatment, and equipment/gadget for measurement, gauges and such other equipment to determine the safe working conditions of the lifting machinery tackle.
5.	Section 31 –	Degree in	(i) A minimum experience of 10	Facilities for

	'Pressure Plant'	Chemical or Electrical or Metallurgical or Mechanical Engineering or its equivalent.	<p>years' in-</p> <p>(a) design or erection or maintenance, or</p> <p>(b) testing, examination and inspection of pressure plants.</p> <p>(ii) He shall be –</p> <p>(a) Conversant with the relevant codes of practices and test procedures relating to pressure vessels;</p> <p>(b) Conversant with statutory requirements concerning the safety of unfired pressure vessels and equipment operating under pressure;</p> <p>(c) Conversant with non-destructive testing techniques as are applicable to pressure vessels;</p> <p>(d) able to identify defects and arrive at a reliable conclusion with regard to the safety of pressure plants.</p>	carrying out hydraulic test, non-destructive test, gauges equipment/ gadgets for measurement and any other equipment or gauges to determine the safety in use of pressure vessels.
6.	<p>(i) Section 36– Precautions against dangerous fumes.</p> <p>(ii) Rule made under sections 41 and 112 concerning ship-building and ship repairs.</p>	Master's degree in Chemistry, or a degree in Chemical Engineering.	<p>(i) A minimum experience of 7 years' in collection and analysis of environmental samples and calibration of monitoring equipment;</p> <p>(ii) He shall –</p> <p>(a) be conversant with the hazardous properties of chemicals and their permissible limit values;</p> <p>(b) be conversant with the current techniques of sampling and analysis of the environmental contaminants; and</p> <p>(c) be able to arrive at a reliable conclusion as regards the safety in respect of entering and carrying out hot work.</p>	Meters, instruments and devices duly calibrated and certified for carrying out the tests and certification of safety in working in confined spaces.
7.	Ventilation systems as	Degree in	(i) A minimum experience of 7	Facilities for

	<p>required under various Schedules framed under Section 87, such as Schedules on –</p> <p>(i) Grinding or glazing of metals and processes incidental thereto,</p> <p>(ii) Cleaning or smoothing, roughening, etc. of articles, by a jets sand, metal shot, or grit, of other abrasive propelled by a blast of compressed air or steam.</p> <p>(iii) Handling and processing of Asbestos, Manufacture of any Article or Substance of Asbestos and any other Processes of Manufacturer of otherwise in which Asbestos is used in any Form</p> <p>(iv) Manufacture of Rayon by viscose process,</p> <p>(v) Foundry operations.</p>	<p>Mechanical or Electrical Engineering or its equivalent.</p>	<p>years' in the design, fabrication, installation, testing of ventilation system and systems used for extraction and collection of dusts, fumes and vapours and other ancillary equipment.</p> <p>(ii) He shall be conversant with relevant codes of practice and test procedures that are current in respect of ventilation and a traction system for fumes, and shall be able to arrive at a reliable conclusion with regard to effectiveness of the system.</p>	<p>testing the ventilation system, instruments and gauges for testing the effectiveness of the extraction systems for dusts, vapours and fumes, and any other equipment needed for determining the efficiency and adequacy of these systems. He shall have the assistance of a suitable qualified technical person who can come to a reasonable conclusion as to the adequacy of the system.</p>
8.	<p>Rule 65 C – Testing and examination of Safety Belts</p>	<p>Degree in Mechanical or Electrical Engineering or its equivalent</p>	<p>A minimum experience of seven years' in testing, examination and inspection of safety belts and shall be conversant with relevant standards of Industrial Safety Belts and harness and their specifications.</p>	<p>Gauges for measurement and instruments for magnifying.</p>

9.	Rule 65 AA – Testing and examination of Ovens and Driers	Degree in Mechanical or Electrical Engineering or its equivalent	<ul style="list-style-type: none"> (i) A minimum experience of seven years in design or maintenance, or operation or testing and examination of ovens and driers. (ii) Knowledge of relevant codes of practices and test procedures that are current. (iii) Conversant with statutory requirements regarding the safety of ovens and driers. (iv) Conversant with safety devices and their proper functioning to ensure the safety. (v) Be able to identify defects and other causes leading to failure of ovens and driers. (vi) Ability to arrive at a reliable conclusion as to the safety of ovens and driers. 	<ul style="list-style-type: none"> (i) Meters, instruments and devices duly calibrated and certified for carrying out the tests and certification of safety. (ii) Facilities for carrying out non-destructive test.
10.	Rule 65 LL – (i) Sub-rule 16 Testing of heater coil	Degree in Mechanical or Electrical Engineering or its equivalent	A minimum experience of seven years in design or operation or maintenance or testing and examination of thermic fluid heater.	Facilities for pressure testing.
	(ii) Sub-rule 18 Testing of Thermic fluid	Master’s Degree in Chemistry or a Bachelor’s degree in Chemical Engineering.	A minimum experience of seven years’ in testing of thermic fluids.	Laboratory facilities to test acidity, suspended matter, ash contents, viscosity and flash point of thermic fluid.
11.	Rule 100 Schedule –X Part II, Para 7, Examination of instruments and safety devices.	Degree in Chemical Engineering or Technology or Instrumentation Engineering or Technology or Mechanical Engineering.	<ul style="list-style-type: none"> (i) A minimum experience of seven years’ in - <ul style="list-style-type: none"> (a) operation or maintenance; or (b) testing, examination and inspection of the process instruments and safety devices. (ii) Must be thoroughly conversant with the relevant codes of practices and test procedures that are current, and be able to arrive at a reliable conclusion as regards the reliability and proper functioning of the process instruments and 	Meters, instruments, devices and other appropriate facilities duly calibrated and certified for carrying out the tests of process instruments and safety devices.

			safety devices.	
12.	Rule 100 Schedule –X Part II, Para 15, Testing, Examination and repair of plants and equipments.	Degree in Chemical Engineering or Technology or Instrumentation Engineering or Technology or Mechanical Engineering	(i) A minimum experience of seven years' in - (a) the operation or maintenance of process plant in a chemical industry; (b) testing, examination and inspection of plant equipment and machinery in a chemical process industry. (ii) He shall - (a) be thoroughly conversant with the process of hazards involved; (b) be able to identify the defects and other causes which may lead to failure of the plant equipment and machinery in chemical process industry; (c) have ability to arrive at a reliable conclusion with regard to the safety and integrity of the plant equipment and machinery.	Non-destructive testing equipment such as ultrasonic thickness gauging instrument and flaw detector hydraulic pump portable toxic and flammable gas detectors (Multi gas detector)
13.	Rule 100 Schedule –X Part II, Para 18, Entry into or work in confined space.	Master's Degree in Chemistry or a Bachelor's degree in Chemical Engineering	(i) A minimum experience of seven years' in collection and analysis of environmental samples and calibration of monitoring equipments. (ii) He shall – (a) be conversant with the hazardous properties of chemicals and their permissible limit value; (b) be conversant with the current techniques of sampling and analysis of contaminants; and (c) be able to arrive at a reliable conclusion as regards the safety in respect of entering the confined space and carrying out hot work or	Portable multi gas detectors as applicable to the Chemical gases or fumes in the confined space, oxygen level meter.

			other maintenance work.	
14.	Rule 100 Schedule – X Part V, Para 5, Testing and Examination of plant and equipment made from reinforced plastics.	Bachelors degree in Plastic Technology or Chemical Engineering or Technology or Mechanical Engineering or Technology or Electrical Engineering	<p>(i) A minimum experience of seven years' in</p> <p>(a) operation or maintenance of process plant in a chemical industry; or</p> <p>(b) testing, examination and inspection of plant and equipment made from reinforced plastics in a chemical industry.</p> <p>(ii) He shall –</p> <p>(a) be thoroughly knowledgeable about the Indian Standards or any other National Standards as regards the plant and equipment made of reinforced plastics.</p> <p>(b) be fully conversant with the chemical compatibility of reinforced plastics;</p> <p>(c) be able to identify the defects and other causes which may lead to failure of the plant and equipment made of reinforced plastics.</p> <p>(d) have ability to arrive at a reliable conclusion with regard to the safety and integrity of the plant and equipment made of reinforced plastics.</p>	Non-destructive testing equipment such as ultrasonic thickness gauging equipment, flaw detector and hydraulic pump.