INSURANCE EXAM · IC-77

IC-77 Engineering Insurance

Revision book

18	2	211
chapters	master tables	numbered sections

FREE SAMPLE: Chapter 1 of 18

CHAPTER 1

Development Of Engineering Insurance And Relevant Legislation

1.1 Timeline
1.2 Britain, U.S.A., Germany
1.3 India
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1.5 Boiler Act 1923
1.6 Mines Act 1952
1.7 De-tariffing

MUST KNOW

1. **1854** M.S.U.A. (inspection club, not an insurer); **1858** Steam Boiler Assurance Co = first engineering insurer.
2. Hartford (U.S.A.) first policy **1867**; engine insurance (now Machinery Breakdown) **1872**.
3. **UK laws:** Boiler Explosion Act **1882**; Factory and Workshop Act **1901** (inspect every **14 months**); Coal Mines Act **1911**. Inspection only, not insurance.
4. **Germany:** rules **1856**; DUV **1866** Mannheim; Prussian DUV **1884**; TUV never linked to insurers.
5. **India:** New India **1953** with Munich Re; Syndicate of five **1954**.
6. **India:** policy = cover only. Insurer inspection = goodwill.
7. **Boiler (1923 Act):** over 22.75 litres; register; certificate up to **24 months**; report accident in **24 hours**.
8. Tariffs withdrawn **1 Jan 2007**; insurers set own rates.

1.1 Timeline

Year	Event
1854	M.S.U.A. founded by engineers (not an insurer)
1856	German boiler rules
1858	Steam Boiler Assurance Co, first engineering insurer
1866	First German DUV, Mannheim
1867	Hartford first policy
1872	Engine insurance begins
1882	Boiler Explosion Act (UK)
1884	Prussian DUV central association
1901	Factory and Workshop Act: boiler inspection every **14 months**
1911	Coal Mines Act (mine boilers)
1920-30	Contractors' policy, then CAR and EAR
1953	New India starts, with Munich Re
1954	Syndicate of five in India

- **After 1945:** CAR and EAR grow; later Computer AR, Electronic Equipment AR, Deterioration of Stock, Advance Loss of Profits.

> **TRAP**
> **Repealed: 1901** Act by Factories Act **1961**; **1911** Act by Mines and Quarries Act **1954**.

1.2 Britain, U.S.A., Germany

- Steam engine; about 500 engines at start of 19th century; boiler explosions.
- **M.S.U.A.:** inspected and advised; employed boiler inspectors.
- First policies covered material damage, personal injury and third party liability from boiler or pressure vessel explosion.
- **Erection insurance:** named perils, no fire.
- **After the war:** more reliability, less pure output.

> **TRAP**
> **TUV in Germany:** no link with any insurer (unlike UK, USA).

1.3 India

- **Need:** more machines; accidents cannot be removed; insurance replaces capital reserves; gives banks a guarantee.
- **Syndicate members:** London and Lancashire, Concord, Atlas, Yorkshire, British India General.
- **Syndicate:** Technical Cell; flag office Calcutta to 1959, then Bombay.
- **Oriental:** own engineering department, Bombay.

> **TRAP**
> UK policies may include inspection service. Indian policies do not.

1.4 Laws

- **Insurance:** Insurance Act **1938**; IRDA Act **1999**.
- **Safety:** Factories Act **1948**; Safety Rules of Plant and Machinery; Indian Boiler Act **1923**; Mines Act **1952**.

> **TODAY'S RULE**
> OSH Code **2020** (labour codes started **21 Nov 2025**) now covers factory safety and mines; Factories Act **1948** and Mines Act **1952** are the older laws.

- **Factories Act inspector powers:** enter factory; examine plant and machinery; examine premises; ask for information or documents; take statements.
- **Factory (s.2(m), Factories Act 1948):** ten or more workers; manufacturing process, with or without power.
- **Four safety rules:** hoists or lifts; lifting machines, chains, ropes, tackles; revolving machinery; pressure plant.

> **TRAP**
> Examination of premises is NOT a safety rule of plant and machinery.

1.5 Boiler Act 1923

TODAY'S RULE

Replaced by the Boilers Act, **2025**. These are the **1923** Act's figures.

- **Boiler (1923 Act):** closed vessel over 22.75 litres, used expressly to make steam under pressure.
- Register before industrial use; Chief Inspector of Boilers issues certificate; not more than **24 months**.
- **Inspection:** corrosion, seam, leakage, scale, fittings; later survey under steam.
- **Section 18:** report accident to Inspector in **24 hours**.

1.6 Mines Act 1952

- **Aim:** safety in mines through inspectors; s.2(i) defines mine.
- **Mine includes:** boring, bore holes, oil wells; shafts; levels and inclined planes; open cast workings; conveyors and ropeways; adits, machinery, railways; workshops and power stations used only for the mine.

TRAP

A ten-worker manufacturing premises is a factory, not a mine.

1.7 De-tariffing

- **TAC:** statutory body under the Insurance Act; set rates, terms, wordings, proposal forms.
- Breach of tariff had penal provisions.
- **First step:** rating tables removed; wordings stayed, changes filed with the regulator.

TODAY'S RULE

Tariffs withdrawn **1 Jan 2007**; insurers set rates and file with IRDAI.