BP603T · B.Pharm Semester VI · Theory Notes

Intellectual Property Rights

Unit IV — Other Forms of Intellectual Property

Unit IV (6 hours)

Pills & Python Notes

From-zero teaching standard: every technical term is defined before use.

Syllabus coverage: Unit IV (6 hours).

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CHAPTER 4: Other Forms of Intellectual Property

Learning Objectives

After studying this chapter, the student will be able to:

1 Define trademark, copyright, industrial design, trade secret, and geographical indication (GI) in simple words.

2 Explain why each of these forms of intellectual property is important for the pharmaceutical industry.

3 Describe the registration process for trademarks, copyrights, and industrial designs in India.

4 State the duration of protection for trademarks, copyrights, industrial designs, and GIs in India.

5 Explain the basics of protecting scientific work such as research papers, theses, and lab notebooks with copyright and trade secrets.

6 Give pharma examples: drug brand names versus generic names, tablet shape and packaging design, research papers, formulation know-how, and herbal product GIs.

7 Identify the legal framework (Acts) governing each form of IP in India.

4.1 Overview: Beyond Patents

In the earlier units you studied patents — the most famous form of intellectual property (IP). A patent protects a new invention. But patents are not the only kind of IP. A pharma company also needs to protect:

- its **brand names** (so nobody sells fake medicines with a similar name),
- its **research papers and books** (so nobody copies them),
- the **shape of its tablet or the design of its medicine packet** (so it looks unique on the shelf),
- its **secret formulas** (so competitors cannot copy the know-how), and
- the **special reputation of medicines or herbal products from a particular region**.

All of these are "other forms of intellectual property." Think of IP as a big family: patents are one brother, trademarks, copyrights, designs, trade secrets, and geographical indications are the other brothers and sisters. Each protects something different.

Analogy: Think of a pharma company like a restaurant. The recipe for the dish is like a patent (an invention). The name of the restaurant is like a trademark (a brand name). The menu booklet's writing is like copyright. The special shape of the serving plate is like an industrial design. The secret spice mix kept locked in the kitchen is a trade secret. And if the restaurant is famous for "Special Biryani of a particular city," that is like a geographical indication.

4.2 Terminology (Key Words You Must Know)

Term	Simple Meaning
Intellectual Property (IP)	Legal rights given to creations of the mind — inventions, brand names, artistic works, designs, secret information, etc.
Trademark	A sign, word, name, logo, or symbol that identifies one company's product and separates it from others. Example: the brand name printed on a paracetamol strip.
Service mark	Like a trademark, but for services instead of goods.
Generic name	The common, scientific name of a drug (e.g., paracetamol). Nobody owns it — everyone can use it.
Brand name	The commercial name given by a company to its drug (e.g., a well-known paracetamol brand). This can be protected as a trademark.
Copyright	The legal right of an author over an original written, artistic, or recorded work — books, research papers, songs, software.
Industrial design	The look or appearance of a product — its shape, colour, pattern, or packaging design — not how it works.
Trade secret	Valuable business information kept secret — e.g., a manufacturing formula, a process, or customer data.
Geographical indication (GI)	A sign used on products that have a special quality or reputation because they come from a particular place (e.g., Darjeeling tea).
Infringement	Using someone else's IP without permission — a legal offence.
Registration	The official process of recording your IP with the government office so you get a legal certificate of ownership.
Registrar	The government officer in charge of a particular IP register (Trademark Registrar, Registrar of Copyrights, etc.).
Term	How long the legal protection lasts (e.g., 10 years for a trademark, renewable).
Original work	A work created by the author's own skill and labour — not copied.
Assignment	Transferring the ownership of your IP to someone else.
Licence	Giving someone else permission to use your IP while you remain the owner.

4.3 Trademarks

4.3.1 Definition

A **trademark** is any word, name, logo, symbol, label, device, or combination of these that identifies the goods of one company and distinguishes them from the goods of others. In simple words: a trademark is a company's signature on its product. When you see it, you know who made the product.

Legal definition (in simple words): Under the Trade Marks Act, 1999, a trademark is a mark capable of being represented graphically and capable of distinguishing the goods or services of one person from those of others.

4.3.2 Why Trademarks Are Important

1. **Patient safety:** In pharmacy, a wrong medicine can harm a patient. A trademark helps the patient and the pharmacist identify exactly which company's medicine they are buying. A fake medicine with a copied name is dangerous.
2. **Trust and reputation:** A good trademark builds trust. A well-known paracetamol brand sells because people trust that name.
3. **Market identity:** A trademark stops competitors from riding on your company's good name.
4. **Business value:** Famous trademarks are worth a lot of money. A strong brand name is an asset of the company.

4.3.3 Brand Name vs Generic Name (Very Important Concept)

- **Generic name** = the scientific, common name of the drug. Example: *paracetamol*. Nobody can own it or stop others from using it. Every company making paracetamol can print "paracetamol" on the strip.
- **Brand name** = the special name a company gives to its own version of the drug. Only that company may use it, and it can be registered as a trademark.

Example: Many companies make tablets containing paracetamol. Each company sells them under its own brand name. The word "paracetamol" is the generic name (free for all), while each company's brand name is its trademark (protected).

Key takeaway: Generic name = free for everyone. Brand name = protected property of one company.

4.3.4 What Can and Cannot Be a Trademark

Can be a trademark	Cannot be a trademark
Invented words (made-up names)	Purely descriptive words ("Sweet Tablets" for sweet tablets)
Company names and logos	Generic drug names (paracetamol)
Symbols, labels, pictures	Names that deceive the public
Colour combinations, packaging get-up	Words hurting religious feelings
Sound marks, 3-D shapes (in some cases)	Marks identical/similar to existing registered trademarks

4.3.5 Registration Process of a Trademark in India

Step-by-step flowchart:

```
Step 1: SEARCH
  Applicant searches the trademark database
  to make sure no similar mark already exists.
                |
Step 2: APPLICATION (Form TM-A)
  File the application with the Trademark
  Registry, with fees and details of goods.
                |
Step 3: EXAMINATION
  The Registrar examines the application and
  may raise objections (e.g., too descriptive,
  too similar to an existing mark).
                |
Step 4: HEARING (if objections)
  Applicant replies / attends hearing to
  overcome the objections.
                |
Step 5: ADVERTISEMENT
  The accepted mark is published in the
  Trademark Journal. The public gets time
  to oppose it.
                |
Step 6: OPPOSITION (if any)
  If someone opposes, both sides are heard
  and the Registrar decides.


                |
Step 7: REGISTRATION
  If no opposition (or opposition decided in
  favour of applicant), the mark is registered
  and a Registration Certificate is issued.
                |
Step 8: RENEWAL
  Protection lasts 10 YEARS, renewable
  again and again forever.
```

4.3.6 Duration of Trademark Protection

A registered trademark is protected for **10 years**, and it can be **renewed any number of times** for further periods of 10 years each. So a trademark can live forever, as long as it is renewed and used.

> Safe fact: Trademarks Act, 1999 — protection for 10 years, renewable.

4.3.7 Rights of a Trademark Owner

1 Exclusive right to use the mark for the registered goods/services.

2 Right to take legal action against anyone who copies the mark (infringement).

3 Right to license or sell (assign) the trademark.

4.4 Copyright

4.4.1 Definition

Copyright is the legal right of an author or creator over an original work — a book, research paper, article, song, film, photograph, or computer software. It gives the creator the exclusive right to copy, publish, and sell the work. In simple words: copyright means "only the author has the right to copy this

work."

Legal definition (in simple words): Under the Copyright Act, 1957, copyright is a bundle of exclusive rights given to the creator of an original literary, dramatic, musical, artistic work, cinematograph film, or sound recording.

4.4.2 Why Copyright Is Important in Scientific Work

Pharma students and scientists constantly produce written work:

- Research papers and review articles
- M.Pharm / Ph.D. theses and dissertations
- Laboratory notebooks and experiment records
- Books, chapters, and study materials
- Teaching slides and educational videos
- Computer programs and databases used in research

Copyright protects all of these. Without copyright, anyone could copy your research paper word-for-word and publish it as their own.

Key takeaway: Patent protects your *invention*. Copyright protects your *expression* — the way you wrote, drew, or recorded it. You cannot copyright an idea or a fact; you copyright the original writing that expresses it.

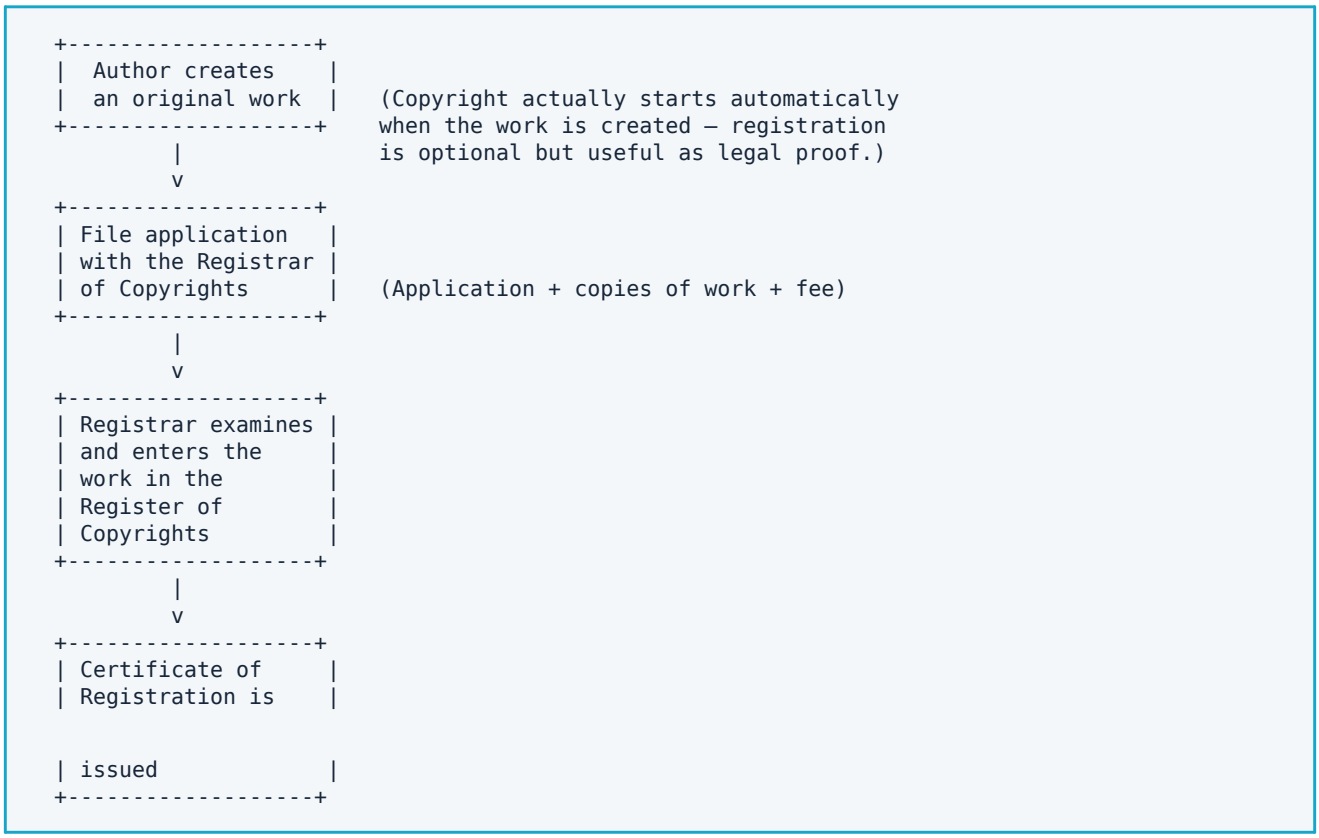
4.4.3 What Copyright Protects and What It Does Not

Copyright PROTECTS	Copyright does NOT protect
Original writing of a research paper	The scientific idea or fact inside it
A thesis written in your own words	A discovery or natural law
Original diagrams and charts you draw	A blank form or simple table of data
Software code you write	A well-known formula everyone uses
Photographs you take in the lab	Short phrases, names, titles (use trademark for those)

Example: If you write an original review article on "Herbal drugs for diabetes," copyright protects *your writing*. But it does not stop someone else from writing their own article on the same topic, or from using the facts you reported.

4.4.4 Registration Process of Copyright in India

Textual diagram of the process:



4.4.5 Duration of Copyright Protection

For literary, dramatic, musical, and artistic works, copyright lasts for the **lifetime of the author plus 60 years** after the author's death. (Different terms apply to some other categories, such as films and sound recordings — as per the latest provisions of the Copyright Act, 1957.)

> Safe fact: Copyright Act, 1957 — for most written works: life of the author + 60 years.

4.4.6 Rights of a Copyright Owner

1. Right to reproduce (copy) the work.
2. Right to publish and sell copies.
3. Right to make translations or adaptations.
4. Right to stop others from copying without permission.

4.5 Industrial Designs

4.5.1 Definition

An **industrial design** protects the *look* of a product — its shape, colour, pattern, or surface decoration. It does NOT protect how the product works (that is the job of a patent). In simple words: design protects "how it looks," patent protects "how it works."

Legal definition (in simple words): Under the Designs Act, 2000, "design" means the features of shape, configuration, pattern, ornament, or composition of lines or colours applied to an article, judged only by

the eye.

4.5.2 Why Industrial Designs Are Important in Pharma

1. **Tablet and capsule appearance:** A company may design a uniquely shaped tablet (e.g., an oval tablet with a score line and embossed logo). The shape helps patients and pharmacists recognise the medicine.
2. **Packaging design:** The look of a medicine strip, bottle label, carton, or syrup bottle helps the brand stand out in the pharmacy. Attractive, distinctive packaging also fights counterfeiting.
3. **Medical devices:** The shape of an inhaler, syringe, or dropper bottle can be design-protected.
4. **Patient compliance:** Easy-to-handle shapes and clear visual design help elderly patients identify their medicines correctly.

> **Example:** A pharma company designs a new child-resistant cap for a syrup bottle with a special pattern and colour. The *mechanism* of the cap could be patented, but the *appearance* — the colour, pattern, and shape judged by the eye — can be registered as an industrial design.

4.5.3 What Can and Cannot Be Registered as a Design

Can be registered	Cannot be registered
New or original shape of an article	Designs that are not new or original
New pattern or ornament on packaging	Designs already published anywhere
New colour combinations on a product	Purely functional features (how it works)
Surface decoration visible to the eye	Trademarks or artistic works (covered by other laws)

4.5.4 Registration Process of a Design in India

```
Step 1: APPLICATION
  File the application with the Designs Office
  (Controller General of Patents, Designs and
  Trademarks), with drawings/photographs of
  the design and fees.
                |
Step 2: EXAMINATION
  The office checks that the design is new
  or original and not previously published.
                |
Step 3: REGISTRATION
  If accepted, the design is registered and a
  Certificate of Registration is issued.
  (There is no opposition stage like in
  trademarks — the process is shorter.)
                |
Step 4: DURATION
  Protection lasts 10 YEARS, extendable by
  a further 5 YEARS (total maximum 15 years).
```

4.5.5 Duration of Design Protection

A registered design is protected for **10 years**, which can be **extended by a further 5 years** — a maximum total of 15 years.

Safe fact: Designs Act, 2000 — 10 years, extendable by 5 years.

4.6 Protection in Scientific Work: Basics, Importance, and Legal Framework

4.6.1 The Basics

Every day in a pharmacy college or research lab, scientific work is created: project reports, theses, research papers, posters, datasets, and new formulations. These need protection so that:

- the **author gets credit** (no one steals your work),
- the **institution can benefit** (licensing, reputation), and
- the **public gets genuine knowledge** (no plagiarism or fake data).

Two main tools protect scientific work:

1. **Copyright** — protects the written/recorded expression (paper, thesis, slides, software).
2. **Trade secrets** — protects unpublished know-how (a formula, a process, lab tricks) kept confidential.

Patents (covered in earlier units) protect the invention itself.

Infographic concept box — "Protect Your Project in 4 Steps": Imagine a poster on the lab wall showing four boxes in a row, each with an icon: **Box 1 — Record:** Maintain a bound, dated lab notebook; sign and date every page. © **Box 2 — Copyright:** Your thesis and papers are automatically protected; register important works. **Box 3 — Keep secrets secret:** Mark confidential pages, use non-disclosure agreements (NDAs) before sharing. **Box 4 — Patent first:** File a patent BEFORE publishing the paper, or the invention becomes public and unpatentable. Tagline at the bottom: *"Publish with pride — but protect first!"*

4.6.2 Importance of Protecting Scientific Work

1. **Encourages research:** Scientists work harder when they know their work cannot be stolen.
2. **Career and credit:** Publications and patents build a researcher's name and promotions.
3. **Institutional income:** Colleges and companies can license protected work and earn revenue.
4. **Public trust:** Protection systems punish plagiarism and fraud, keeping science honest.
5. **National progress:** A country that protects research attracts investment and talent.

4.6.3 Legal Framework (India) — Summary Table

Form of IP	Governing law in India	Office	Term of protection
Trademark	Trade Marks Act, 1999	Trademark Registry	10 years, renewable
Copyright	Copyright Act, 1957	Copyright Office	Life + 60 years (written works)
Industrial design	Designs Act, 2000	Designs Office	10 years + 5-year extension
Geographical indication	Geographical Indications of Goods (Registration and Protection) Act, 1999	GI Registry	10 years, renewable

Form of IP	Governing law in India	Office	Term of protection
Trade secret	No single Act; protected through contracts (NDAs), employment terms, and common law	—	As long as it stays secret

Key takeaway: Every form of IP has its own Act, its own office, and its own time limit — except trade secrets, which have no special Act and are protected by keeping them secret and using legal agreements.

4.7 Trade Secrets in the Pharma Industry

4.7.1 Definition

A **trade secret** is valuable business information that is kept confidential and gives the business an advantage over competitors. It is protected *by remaining secret* — there is no registration and no certificate.

Simple definition: A trade secret is useful secret knowledge of a company — like a recipe nobody else knows.

4.7.2 Trade Secrets in Pharma — Examples

1. **Formulation know-how:** The exact method of mixing, granulating, coating, or compressing a tablet so it dissolves perfectly — the "tricks" learned after years of trial and error.
2. **Manufacturing processes:** Temperature, pressure, and timing details of a chemical reaction that improve yield.
3. **Supplier and cost data:** Secret sources of raw materials and pricing strategies.
4. **Clinical and market data:** Unpublished trial results, marketing plans, and customer lists.
5. **Analytical methods:** A company's own in-house testing method that is faster or cheaper.

4.7.3 How Trade Secrets Are Protected

Since there is no registration, protection works through:

1. **Non-disclosure agreements (NDAs):** Legal contracts signed by employees, students, and business partners promising not to reveal secrets.
2. **Restricted access:** Only selected people can enter the R&D area; documents marked "Confidential."
3. **Employment contracts:** Clauses that stop employees from carrying secrets to a competitor.
4. **IT security:** Passwords, limited file access, and controls on copying data.

4.7.4 Trade Secret vs Patent — Comparison Table

Point	Trade secret	Patent
Registration	None needed	Must apply and be granted

Point	Trade secret	Patent
Duration	Unlimited — as long as it stays secret	Fixed (20 years), then free for all
Disclosure	Nothing is published	Full details are published
Risk	If leaked, protection is lost forever	Protected by law even if everyone knows it
Best for	Process tricks, formulas hard to reverse-engineer	New inventions easy to copy once seen

Analogy: A patent is like announcing your secret recipe in the newspaper but getting a 20-year legal right over it. A trade secret is like never telling anyone the recipe — it can last forever, but if someone finds out, you have nothing.

Key takeaway: Pharma companies often keep *manufacturing know-how* as trade secrets while patenting the *drug molecule* itself.

4.8 Geographical Indications (GIs) in the Pharma Industry

4.8.1 Definition

A **geographical indication (GI)** is a sign used on products that have a specific geographical origin and possess qualities or a reputation linked to that place. In simple words: a GI tag tells the buyer, "this genuine product comes from this particular place, and that place is the reason it is special."

Legal definition (in simple words): Under the Geographical Indications of Goods (Registration and Protection) Act, 1999, a GI identifies goods as originating from a particular territory where a given quality, reputation, or characteristic of the goods is essentially linked to that origin.

4.8.2 Why GIs Matter for Pharma and Herbal Products

India is famous for traditional and herbal products whose quality depends on *where* they grow:

- **Herbal drugs and AYUSH products:** The medicinal value of many herbs depends on the soil, climate, and traditional knowledge of a region.
- **Fighting fakes:** A GI tag stops sellers from other places from misusing a famous regional name on ordinary products.
- **Farmer and community income:** GI protection helps local growers and traditional communities earn a fair price.
- **Export value:** GI-tagged products command trust and better prices in world markets.

Illustration: *Darjeeling tea* is the classic Indian example of a GI — tea grown in the Darjeeling region has a unique flavour because of that region's climate and soil, so only tea from there may carry the name. In the same way, herbal and traditional medicinal products linked to a particular region can benefit from GI protection.

4.8.3 How GI Protection Works

1 An association of producers/artisans from the region applies to the **GI Registry**.

2 They show the link between the product's quality/reputation and the geographical area, plus the traditional method of production.

3 Once registered, only authorised producers from that region may use the GI tag.

4 Registration lasts **10 years** and can be **renewed**.

Safe fact: GI Act, 1999 (Geographical Indications of Goods (Registration and Protection) Act, 1999) — 10 years, renewable.

4.8.4 GI vs Trademark — Do Not Confuse

Point	Trademark	Geographical indication
Owned by	One company or person	A community/association of producers
Shows	Who made it (commercial origin)	Where it comes from (geographical origin)
Transferable?	Can be sold/licensed	Cannot be sold to outsiders; belongs to the region
Example	A company's brand name on a paracetamol strip	Darjeeling tea (illustration)

Key takeaway: A trademark says "made by Company X." A GI says "comes from Place Y, and that is why it is special."

4.9 Comparison Master Table: All Forms of IP in One Glance

Feature	Patent	Trademark	Copyright	Industrial Design	Trade Secret	GI
Protects	New invention	Brand name/logo	Original writing/work	Product appearance	Secret information	Regional product reputation
Pharma example	New drug molecule	Brand name of a paracetamol product	Research paper, thesis	Tablet shape, strip design	Formulation know-how	Herbal product linked to a region
Registration needed?	Yes	Yes (recommended)	Optional	Yes	No	Yes
Indian law	Patents Act, 1970	Trade Marks Act, 1999	Copyright Act, 1957	Designs Act, 2000	Contracts/common law	GI Act, 1999
Duration	20 years	10 years, renewable forever	Life + 60 years	10 + 5 years	Till secret lasts	10 years, renewable

4.10 Pharmacy Relevance

1 **Every pharmacist handles trademarks daily:** When you dispense a medicine, you read the *brand name* (trademark) and the *generic name*. Confusing look-alike brand names is a real cause of medication errors — trademark awareness is patient safety.

2 **Counterfeit medicines:** Fake drugs often copy famous trademarks and packaging designs. Knowing IP helps you spot fakes.

3 **Your own research:** Your M.Pharm/Pharm.D project, thesis, and any paper you publish are protected by copyright from the moment you write them.

4 **Industry jobs:** In pharma companies, the IP/regulatory department manages trademarks, designs, and trade secrets. This is a career path for pharmacists.

5 **Herbal and AYUSH industry:** GI protection supports genuine traditional products and protects them from imitation — directly relevant to pharmacognosy.

6 **Formulation development:** The know-how you develop in R&D may be kept as a trade secret — handling it responsibly is part of professional ethics.

4.11 India Context

- India has a complete, modern IP system: the Trade Marks Act (1999), Copyright Act (1957, amended to meet digital-age needs), Designs Act (2000), and GI Act (1999) — administered under the Office of the Controller General of Patents, Designs and Trade Marks, with information available on the official Indian IP portal (ipindia.gov.in), as per the latest amendments and notifications.
- India is one of the world's largest suppliers of generic medicines — so trademarks (brand names) and trade secrets (manufacturing know-how) are everyday business tools of Indian pharma companies.
- India is a global leader in GI registrations for agricultural and traditional products (Darjeeling tea being the famous illustration); growing interest exists in protecting traditional medicinal and herbal products linked to specific regions.
- For B.Pharm students: the Pharmacy Council of India (PCI) syllabus includes IPR because a modern pharmacist must understand brand names, patents, and data protection to work safely and legally in industry, hospitals, and community pharmacy.

Key Points (Must Remember)

1 A **trademark** identifies a company's goods — e.g., a drug brand name; protected 10 years, renewable (Trade Marks Act, 1999).

2 **Generic name** (paracetamol) is free for all; **brand name** is one company's protected trademark.

3 **Copyright** protects original writing — research papers, theses, books; lasts life + 60 years (Copyright Act, 1957); registration is optional but useful.

4 An **industrial design** protects how a product *looks* (tablet shape, packaging) — not how it works; 10 years + 5-year extension (Designs Act, 2000).

5 A **trade secret** is valuable information kept secret (formulation know-how); no registration, no fixed term — protection lasts as long as secrecy lasts; guarded by NDAs and restricted access.

6 A **GI** links a product's quality to its place of origin (Darjeeling tea as illustration); 10 years, renewable (GI Act, 1999); owned by a community, not one company.

7 Patent = invention; trademark = brand; copyright = expression; design = appearance; trade secret = secret know-how; GI = regional reputation.

8 Protect scientific work in 4 steps: record copyright keep secrets secret patent before publishing.

Common Confusions (Cleared)

1 **Confusion:** "Trademark and brand name are totally different things."

Truth: A brand name usually *functions* as a trademark. When registered, the brand name IS the trademark.

1 **Confusion:** "If I write a paper on paracetamol, I own the facts about paracetamol."

Truth: No. Copyright protects *your writing*, not the facts or ideas inside it.

1 **Confusion:** "Design registration protects how my machine works."

Truth: No — design protects only appearance. Working/function is protected by patents.

1 **Confusion:** "A GI belongs to one company."

Truth: No — a GI belongs to the community of producers of that region; it cannot be sold to outsiders.

1 **Confusion:** "Trade secrets must be registered like patents."

Truth: No — trade secrets have no registration at all. Secrecy itself is the protection.

1 **Confusion:** "Copyright needs registration to exist."

Truth: Copyright exists automatically when you create the work. Registration is optional — it only gives stronger legal proof.

Common Mistakes (Avoid in Exams)

1 Writing that trademark protection is "20 years" — it is **10 years, renewable**.

2 Writing that copyright lasts "60 years from publication" for books — it is **life of the author + 60 years**.

3 Mixing up the Designs Act year (2000) with the Trade Marks Act year (1999).

4 Saying "design protects function" — design protects **appearance only**.

5 Calling a generic drug name a trademark — generic names **cannot** be trademarks.

6 Forgetting that trade secrets have **no Act and no registration** in India.

7 Writing GI examples as company-owned brands — GIs are **community-owned**.

Mnemonics

1 **"To Catch Intelligent Tigers, Guard"** — the six forms of IP in this unit's family:

Trademark – **C**opyright – **I**ndustrial design – **T**rade secret – **G**I (Think: *To Catch Intelligent Tigers, Guard* — guard your IP!)

1 **"10 – Life+60 – 10+5 – 10"** — the terms chant:

Trademark **10** (renewable) – Copyright **life + 60** – Design **10 + 5** – GI **10** (renewable).

1 **"Brand–Write–Look–Hide–Place"** — what each protects:

Trademark = **Brand**, Copyright = **Write**, Design = **Look**, Trade secret = **Hide**, GI = **Place**.

Exam Summary

Other forms of IP protect everything a patent does not. A **trademark** (Trade Marks Act, 1999) is a brand name, logo, or symbol identifying one company's goods — registered through search application examination advertisement registration, protected for **10 years renewable**. The **generic name** of a drug (paracetamol) is free for all; the **brand name** is a protected trademark. **Copyright** (Copyright Act, 1957) protects original written and creative works — research papers, theses, books — automatically on creation, lasting **life of the author + 60 years**; it protects expression, not ideas or facts. An **industrial design** (Designs Act, 2000) protects a product's appearance — tablet shape, packaging design — registered with drawings at the Designs Office, protected **10 years extendable by 5**. **Trade secrets** are valuable confidential know-how (formulation and process tricks) with no registration and no Act — protected by NDAs, restricted access, and secrecy for as long as secrecy lasts. A **geographical indication** (GI Act, 1999) tags products whose quality comes from their place of origin (Darjeeling tea as the classic illustration), owned by producer communities, protected **10 years renewable**. Scientific work is protected by copyright plus trade-secret discipline: record in dated notebooks, register important works, use NDAs, and file patents before publishing.

One-Minute Revision

- IP family beyond patents: **trademark, copyright, industrial design, trade secret, GI**.
- Trademark = brand identity; 1999 Act; **10 yrs renewable**; generic name free, brand name protected.
- Copyright = original writing; 1957 Act; **life + 60 yrs**; protects expression, not ideas; registration optional.
- Design = appearance only; 2000 Act; **10 + 5 yrs**; e.g., tablet shape, strip design.
- Trade secret = secret know-how; **no Act, no registration**; NDAs + secrecy; lasts till secret lasts.
- GI = place-linked reputation; 1999 Act; **10 yrs renewable**; community-owned (Darjeeling tea illustration).
- Protect science: **record copyright keep secrets patent before publishing**.

Exam Questions

Short answer questions (2–5 marks):

1 Define trademark with one pharma example.

2 Distinguish between a generic name and a brand name of a drug.

3 What is the term of protection for a registered trademark in India?

4 Define copyright. Name two kinds of scientific work it protects.

5 What does an industrial design protect — appearance or function? Give a pharma example.

6 Define trade secret with one pharma example.

7 What is a geographical indication? Give one illustration.

8 State the duration of protection under the Designs Act, 2000 and the GI Act, 1999.

9 Why is copyright registration useful even though it is optional?

10 Name the Indian Acts governing trademarks, copyright, designs, and GIs.

Long answer questions (10 marks):

1 Define trademark. Explain its importance in the pharmaceutical industry and describe the step-by-step registration process in India.

2 What is copyright? Discuss its importance in protecting scientific work such as research papers and theses, and explain the registration process and duration of protection.

3 Define industrial design. Explain with pharma examples how it differs from a patent, and describe its registration process and term of protection.

4 What is a trade secret? Explain how trade secrets are protected in the pharma industry and compare trade secrets with patents in a table.

5 Define geographical indication. Explain its importance for herbal and traditional products in India with an illustration, and distinguish GI from trademark.

MCQs (with answer key):

1 A registered trademark in India is protected for:

a) 20 years b) 10 years, renewable c) Life + 60 years d) 15 years **Answer: b**

1 The generic name of a drug:

a) Can be registered as a trademark b) Is free for all manufacturers to use c) Belongs to the first company d) Needs GI registration **Answer: b**

1 Copyright under the Copyright Act, 1957, for a literary work lasts for:

a) 10 years b) 20 years c) Life of the author + 60 years d) 100 years **Answer: c**

1 An industrial design protects:

a) How a product works b) How a product looks c) The chemical formula d) The brand name **Answer: b**

1 The Designs Act, 2000 gives protection for:

a) 10 years + 5-year extension b) 20 years c) Life + 60 years d) 10 years, renewable forever **Answer: a**

1 Which of the following is TRUE about trade secrets in India?

a) They must be registered b) They are protected for 20 years c) They are protected by secrecy and contracts like NDAs d) They are governed by a special Trade Secrets Act **Answer: c**

1 A geographical indication is owned by:

a) One company b) The government c) A community of producers of the region d) The inventor **Answer: c**

1 Darjeeling tea is an illustration of:

a) Trademark b) Patent c) Geographical indication d) Copyright **Answer: c**

1 Copyright protects:

a) Ideas and facts b) The original expression of a work c) Generic drug names d) Secret formulas **Answer: b**

1 The Trade Marks Act of India was enacted in:

a) 1957 b) 1970 c) 1999 d) 2000 **Answer: c**

Viva questions:

1 What is the difference between a trademark and a copyright?

2 Why can a generic drug name not be a trademark?

3 Your friend copies your project report word-for-word. Which IP right is violated?

4 How long does design protection last in India?

5 Name one way a pharma company protects its formulation know-how without a patent.

6 Who owns a GI — a company or a community?

7 Should you publish your research paper before or after filing a patent? Why?

8 What is an NDA and why is it used in pharma R&D?

Application-based questions:

1 A company launches paracetamol tablets under a brand name very similar to a famous existing brand, with nearly identical strip colours. Which IP rights are involved, and what legal remedy does the original company have?

2 You have developed a new tablet-coating process in your college lab. Your guide wants to publish it as a paper, but a company wants to commercialise it. Advise on the correct sequence of IP protection steps.

3 A herbal company in a hill region makes a traditional medicine famous for 200 years. Traders from other states sell ordinary products using the region's name. Which IP tool should the local producers use, and why is a trademark not the right answer?

4 An employee leaves a pharma company and joins a competitor, carrying the secret granulation parameters in memory. What protection did the first company have, and what should it have done to strengthen it?

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