PART 3: GENERAL CHARACTERISTICS

FUNDAMENTAL OR CHARACTERISTIC. WHAT'S THE DIFFERENCE?

Part 3 is **assessment of general characteristics**, and the exam loves it because the contents page does most of the work for you. First, the distinction that makes the whole part make sense:

≡

Fundamental

(Part 1)
What

every

installation has. Every installation has

an

earthing arrangement. Every installation has live conductors.

≠

Characteristic

(Part 3)
What makes yours

different

. Whether it's TT or TN-C-S. Whether it's 230 V or 400 V. The size and type of the incoming fuse.

An analogy that helps.
Everyone who drives needs a **licence** — that's fundamental. What the licence lets you drive, car or motorbike, is the **characteristic**. Same with people: we all have a skeleton (fundamental); hair and skin colour are characteristics.

So **230 V nominal** is a general *characteristic*, not a fundamental principle — an industrial site may need 400 V or 11 kV. Most people get this wrong first time.

CHAPTER	COVERS	KEYWORD THAT SENDS YOU HERE
31	Purposes, supplies and structure — 311 maximum demand, 312 conductor arrangement and system earthing, 313 supplies, **314 division of an installation**	"maximum demand", "number of final circuits"
32	**External influences** — but it sends you to Appendix 5	"external influence", "category code"
33	**Compatibility**	"compatibility of equipment"
34	**Maintainability**	"maintainability", "who shall be consulted"
35	**Safety services**	"recognised source for safety services"
36	**Continuity of service**	"continuity of service", "assessment for each circuit"

Part 3 also carries the **system diagrams** — TN-S, TN-C-S, TT and the rest, drawn as line diagrams with the supply, the load and the protective conductors. Worth knowing they're there, because "identify this system" questions are popular.

> ⚠ **Single phase two wire, three wire, two phase three wire…** When the book counts "wires" here it means **live conductors** (line and neutral). The earth isn't in that count, even though you'll still have one.

A newer arrangement worth knowing about: **PNB** — protective neutral bonding — sitting alongside the familiar PME arrangement, with the neutral-earth link made at the consumer's side rather than the supply side. Expect to see more of it.

- **Chapter 30** · assessment of general characteristics
- **Chapter 31** · purposes, supplies and structure
- **Part 3** · system line diagrams (TN-S, TN-C-S, TT)

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