

CHAPTER 5

Sensory, Attentional and Perceptual Processes

CBSE · Psychology CI-11 · Class 11

WHAT THIS CHAPTER DOES

Boards prep that builds confidence, not anxiety.

TODAY'S MISSION

Today's Mission

WHY THIS MATTERS

The Cognition Pipeline

TOPIC

Quick prerequisite check

TOPIC

A

**PART A —
Sensation**

TOPIC

Definitions you must reproduce verbatim

POINT 1	POINT 2	POINT 3	POINT 4

TOPIC

Sense organs at a glance

WORKED EXAMPLE

The eye — a guided walkthrough

- 1 Light enters through the transparent CORNEA, which does most of the bending.
- 2 It passes through the PUPIL — an opening whose size is regulated by the IRIS (the coloured ring).
- 3 The LENS fine-tunes focus by changing shape (accommodation).
- 4 Light strikes the RETINA at the back of the eyeball.
- 5 RODS (dim-light, peripheral) and CONES (colour, sharp detail) transduce light into neural signals.
- 6 Signals converge at the FOVEA region for maximum acuity, then leave via the OPTIC NERVE.

- 7 Impulses reach the visual cortex in the occipital lobe, where perception begins.

TRY IT · SOLVE BEFORE YOU PEEK

Quick Test — 60 seconds

Work it out before you flip the answer.

SOLUTION

ANSWER Sensory adaptation

TOPIC

Signal Detection Theory — 4 outcomes

POINT 1

POINT 2

POINT 3

POINT 4

TOPIC

B

**PART B —
Attention**

WORKED EXAMPLE

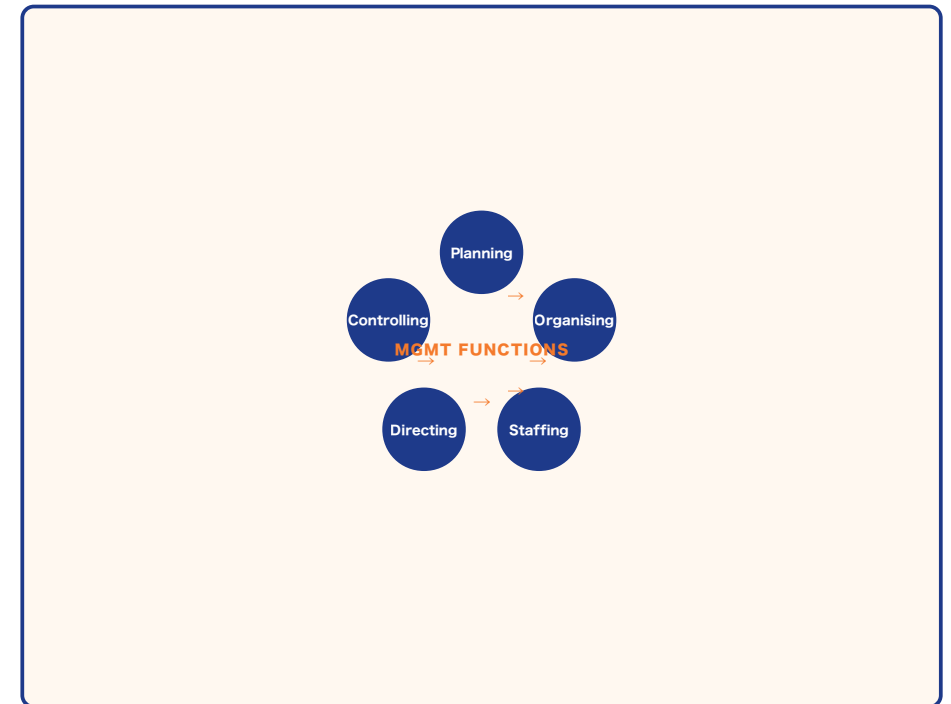
The cycle of attention

- 1 **SELECTIVE** — choose one stimulus, suppress others (cocktail party).

- 2 **SUSTAINED** — hold focus over minutes/hours (vigilance — air traffic control).

- 3 **DIVIDED** — share resources across two tasks (driving + conversation, accuracy drops).

- 4 **SHIFTING** — switch flexibly when priorities change (alarm interrupts study).



TOPPER TEMPLATE · MARK-BY-MARK

Model 5-mark answer — Broadbent vs Treisman

TRY IT · SOLVE BEFORE YOU PEEK

Quick Test — 45 seconds

Work it out before you flip the answer.

SOLUTION

ANSWER Treisman's attenuation

TOPIC

C

PART C — Perception

TOPIC

Gestalt laws of perceptual organisation

POINT 1

POINT 2

POINT 3

POINT 4

WORKED EXAMPLE

Why the Müller-Lyer illusion works

- 1** STIMULUS: two horizontal lines of equal length; one ends in '>—<' (outward), other in '<—>' (inward).
- 2** EXPECTED: equal — they are physically identical.
- 3** ACTUAL: outward-pointing line looks ~20-25% longer.
- 4** EXPLANATION (size constancy + depth cues): outward arrows resemble an outer building corner that is FARTHER from the eye; inward arrows resemble a nearer inside corner. The brain compensates by enlarging the 'far' line.
- 5** EVIDENCE: the carpentered-world hypothesis predicts that people from non-carpentered cultures (round huts, no right angles) show a weaker illusion — confirmed cross-culturally.
- 6** TAKEAWAY: illusions are not failures of vision; they are perception's normal rules applied to atypical inputs.

TOPIC

Depth cues at a glance

TOPIC

Perceptual constancies — quick recap

MARKS DISTRIBUTION

Where the marks live

PYQ PATTERNS

5-year PYQ patterns

PYQ PATTERNS

Top PYQ patterns to drill

#1	1-mark MCQ on threshold definitions and Weber's law (1 marks)	90%
#2	3-mark short note on Gestalt laws with example (3 marks)	80%
#3	4-mark differentiation: monocular vs binocular cues (4 marks)	70%
#4	5-mark explain Broadbent OR Treisman model (5 marks)	65%
#5	6-mark application: explain Müller-Lyer illusion using size constancy (6 marks)	55%

RECAP · MEMORISE THESE

Chapter in 6 lines

1 Sensation = receptor detection; Perception = brain interpretation; Attention bridges them.

2 Thresholds: absolute (50% detection) and difference (JND, Weber's law).

3 Eye: cornea-iris-pupil-lens-retina(rods+cones)-fovea-optic nerve. Ear: outer-ossicles-cochlea.

4 Attention: selective (Broadbent filter, Treisman attenuation), sustained (vigilance), divided.

5 Gestalt laws organise sensation: figure-ground, proximity, similarity, continuity, closure.

6 Depth cues (monocular + binocular), constancies and illusions show

WHAT'S NEXT

Next chapter



Practice now

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