

3.7 Classical Conditioning

Name: _____ Class: _____ Date: _____

Total: 11 marks

KEY WORDS discrimination 分化 • extinction 消退 • spontaneous recovery 自发恢复
• generalisation 泛化 • acquisition 习得

Objective

Build the skills to answer exam questions on **classical conditioning** 经典条件作用.

You must be able to:

- label **US** 无条件刺激, **UR**, **CS** 条件刺激 and **CR** in an example
- describe **acquisition** 习得, **extinction** 消退 and **spontaneous recovery** 自发恢复
- distinguish **generalisation** 泛化 from **discrimination** 分化
- state what classical conditioning explains about emotional responses

1 Worked examples

Study these first. Each one shows the method for a task used later.

■ The four terms

An **unconditioned stimulus** produces a response naturally (food → salivation). Pair a **neutral stimulus** with it repeatedly and that stimulus becomes a **conditioned stimulus**, producing a **conditioned response** on its own.

■ Three phases

Acquisition: the pairing that establishes the response. **Extinction:** presenting the CS without the US until the CR fades. **Spontaneous recovery:** the CR reappearing after a rest, showing extinction suppresses rather than erases.

■ Generalisation and discrimination

Generalisation: similar stimuli also produce the response. **Discrimination:** learning to respond only to the specific CS and not to similar stimuli.

■ Emotional learning

A neutral situation paired with a frightening event can come to produce fear by itself. This accounts for many learned fears and for why exposure — repeated CS without US — is used to reduce them.

2 Practice

2.1 In a study where a tone precedes a puff of air to the eye, identify the CS and the CR. [2]

2.2 Explain what spontaneous recovery shows about extinction. [2]

2.3 A child bitten by a large dog becomes afraid of all dogs.

(a) Name the process. [1]

(b) State the process by which the fear could be narrowed to that one dog. [1]

3 Exam-style questions

3.1 Presenting the CS repeatedly without the US produces [1]

A	B
C	D

A acquisition

B extinction

C generalisation

D spontaneous recovery

3.2 In the tone-and-air-puff example, the air puff is the [1]

A	B
C	D

A conditioned stimulus

B unconditioned stimulus

C conditioned response

D neutral stimulus

3.3 A therapist treats a phobia by repeated safe exposure to the feared object.

(a) Name the learning process being used. [1]

(b) Explain why the fear may briefly return later. [2]
