10.1 Stress, arousal, anxiety and coping

Name: _____ Class: _____ Date: _____ **Total: 23 marks**

KEY WORDS stress • arousal • state anxiety • somatic anxiety • catastrophe theory • coping

Objective

Build the skills to answer exam questions on **stress** , **arousal** , **anxiety** and **coping** , and how they affect performance.

You must be able to:

- describe the transactional model of stress and the stress response
- compare theories of arousal and performance
- distinguish state and trait, and cognitive and somatic anxiety
- compare problem-focused, emotion-focused and avoidance coping
- match coping to how controllable the stressor is

1 Key knowledge and worked examples

■ Stress, arousal and anxiety

Stress arises when a person sees an **imbalance** between the demands of a situation and their resources to cope. In the **transactional model** (Lazarus), **primary appraisal** asks "is this a threat (or a challenge)?" and **secondary appraisal** asks "can I cope?". The same event (a final) can be a threat to one athlete and a challenge to another.

Stress response: the **sympathetic** nervous system and **adrenaline** give a fast response (heart rate, breathing, sweating up); the slower **HPA axis** releases **cortisol**.

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Arousal is a general state of physical and mental activation, from deep sleep to high excitement.

theory	shape	key idea
drive theory	straight line up	more arousal → more of the dominant response: good for experts, bad for beginners
inverted-U	rises then falls	best at moderate arousal; lower optimum for complex, fine skills and beginners
catastrophe theory	sudden drop	if cognitive anxiety is high, beyond the peak performance collapses and does not recover easily
IZOF	individual zone	each athlete has their own zone of best arousal

Anxiety is a negative emotional state with worry and nervousness. **Trait** anxiety: a general tendency to feel anxious; **state** anxiety: anxiety in the moment. **Cognitive** anxiety: worry, negative thoughts; **somatic** anxiety: bodily signs (butterflies, sweating, tense muscles). Multidimensional anxiety theory: performance falls as cognitive anxiety rises, follows an inverted-U with somatic anxiety, and rises with self-confidence. Anxiety is measured with questionnaires (e.g. CSAI-2), physiological measures (heart rate, cortisol) or observation.

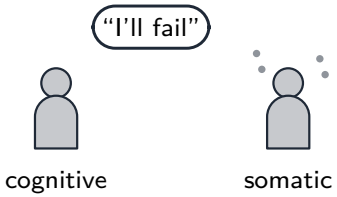
Coping: problem-focused (act on the cause: plan, practise, ask for help); **emotion-focused** (manage the feelings: relaxation, positive self-talk, reappraisal); **avoidance** (distraction, withdrawing: may help short term only). Chronic stress without recovery can lead to **burnout** (exhaustion, lower sense of achievement, devaluing the sport).

AHL – controllability: use **problem-focused** coping when the stressor can be changed (poor fitness, tactics) and **emotion-focused** coping when it cannot (weather, a referee's decision, an injury that has happened). Social support should match the need: practical help, information or emotional support.

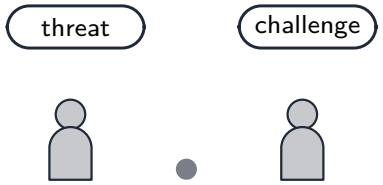
Answer shapes: name the theory, sketch or describe its shape, and apply it to the performer and the skill.

2 Practice

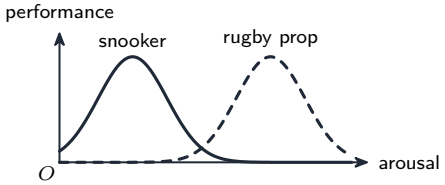
2.1 Distinguish between cognitive anxiety and somatic anxiety. [2]



2.2 Using the transactional model, explain why two players react differently to taking a penalty in a cup final. [3]

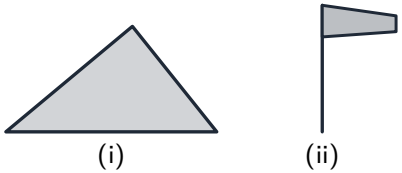


2.3 Using the inverted-U theory, explain why a snooker player and a rugby prop have different optimal levels of arousal. [3]



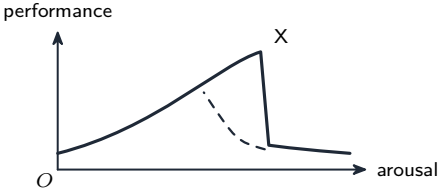
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2.4 A cyclist is worried about **(i)** her poor hill-climbing and **(ii)** strong wind forecast for race day. Suggest a suitable coping strategy for each, and justify your choices. [3]



3 Exam-style questions

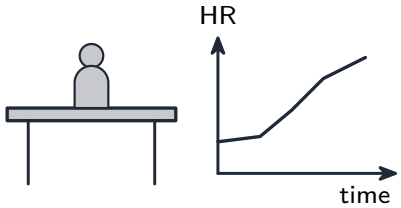
3.1 The graph shows catastrophe theory.



(a) Describe what happens to performance at point X. [2]

(b) Explain why lowering arousal a little may not bring performance back. [2]

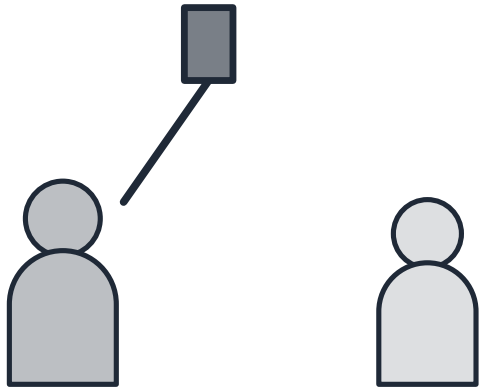
3.2 A gymnast feels very anxious before competitions.



(a) Outline **two** ways her anxiety could be measured. [2]

(b) Suggest **three** coping strategies she could use and classify each. [3]

3.3 A footballer has just been sent off after a wrong refereeing decision, and the team must play the rest of the match with ten players.



Explain how the player and the team could cope, using the controllability of the stressors. [3]

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