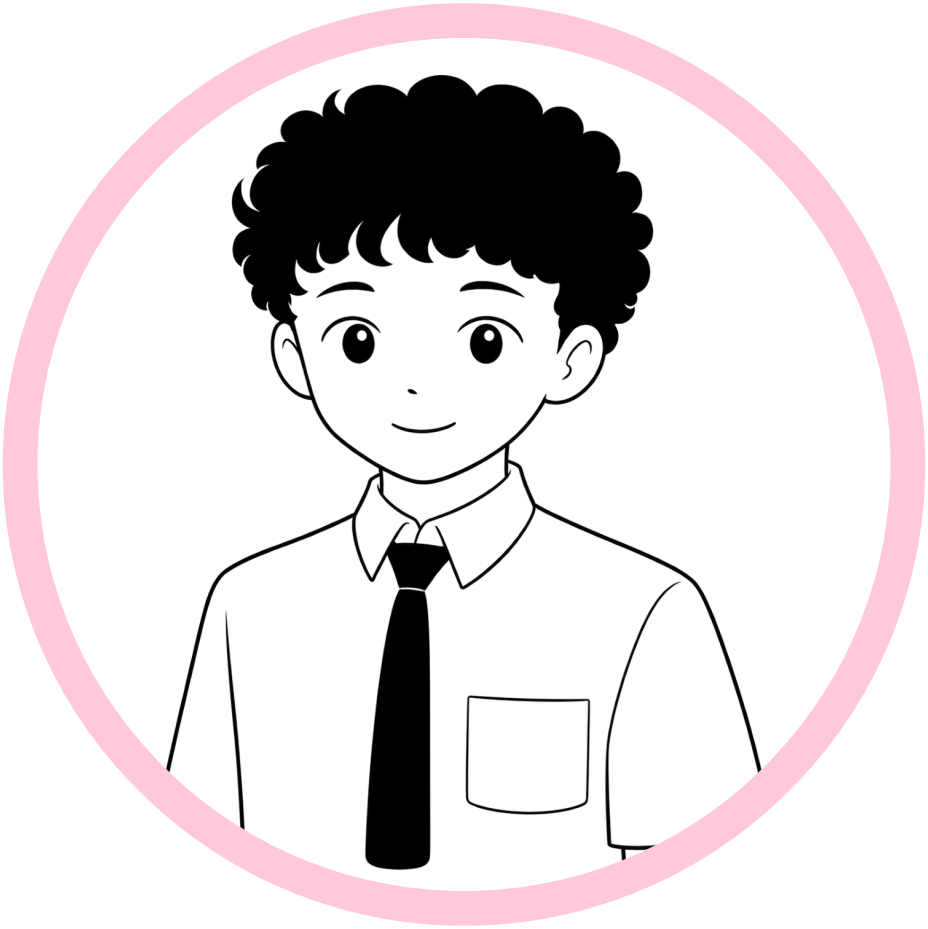
AQA A-LEVEL PSYCHOLOGY · 7182

PSYCHOLOGY



EXAM QUESTION PACK

3.3.7 PHYSIOLOGY OF STRESS

SCORE	PERCENTAGE
/34	%

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Q1.

A steroid hormone that regulates energy use and the immune system, secreted from the adrenal glands when stress is experienced.

Which of the following substances is described above?
Write **A**, **B**, **C**, or **D** in your answer book.

A Adrenaline

B Adrenocorticotropin

C Corticotropin-releasing hormone

D Cortisol

(Total 1 mark)

Q2.

Below are four evaluative statements about general adaptation syndrome (GAS). Which statement is **TRUE**? Write **A**, **B**, **C**, or **D** in your answer book.

A It correctly explains how everyone responds in different ways to different sources of stress.

B It fails to explain what happens when a person is repeatedly exposed to stress.

C It is better at explaining female responses to stress than male responses to stress.

D It wrongly assumes that the body responds in the same way to different sources of stress.

(Total 1 mark)

Q3.

Outline **one** difference between the functions of the hypothalamic pituitary-adrenal system and the sympathomedullary pathway.

(Total 2 marks)

Q4.

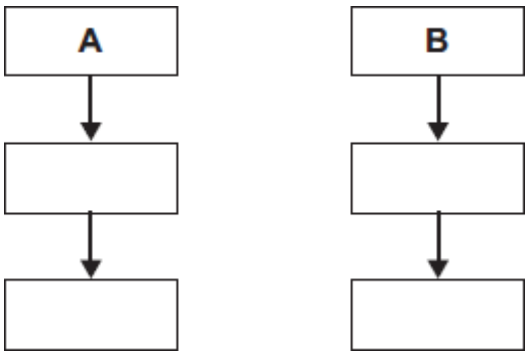
Outline **one** limitation of the general adaptation syndrome as a model for the physiology of the stress response.

(Total 2 marks)

Q5.

Complete the diagram below so that it shows stages of the sympathomedullary pathway and the pituitary-adrenal system. For **each** stage, write the appropriate letter in the correct box.

HYPOTHALAMUS



A adrenal medulla

B adrenal cortex

C decreases heart rate and blood pressure

D liver stores energy

E cortisol / corticosteroids released

F adrenaline and noradrenaline released

G pituitary gland

H gets body ready for 'fight or flight'

I immune system suppressed

(Total 4 marks)

Q6.

Mannie has a well-paid job. However, she worries about work problems all the time, suffers from sleeplessness and always has a cold. Jilly works in the same company doing the same job. Although she works just as hard as Mannie, she does not worry about work and is able to relax quite happily in the evenings and at the weekends. Jilly cannot remember the last time she was ill.

(a) Briefly describe how the endocrine system is involved in mediating and responding to stress. Refer to Mannie **and** Jilly in your answer.

(4)

(b) Outline personal variables which might explain why Mannie and Jilly respond so differently to the same situation.

(4)

(Total 8 marks)

Q7.

Outline the pituitary-adrenal system.

_____

_____

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Extra space _____

(Total 3 marks)

Q8.

Outline the sympathomedullary pathway.

Extra space _____

(Total 3 marks)

Q9.

The body's response to stress includes the pituitary-adrenal system and the sympathomedullary pathway. The following are all features of this stress response.

A Adrenal medulla

B Noradrenaline

C Adrenal cortex

D Adrenaline

E Cortisol / Corticosteroids

F Adrenocorticotrophic hormone (ACTH)

Select **two** from the above list that are linked to the pituitary-adrenal system and **two** from the list that are linked to the sympathomedullary pathway.

Put **one** letter in each box.

Pituitary-adrenal system		

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Sympathomedullary pathway		

(Total 4 marks)

Q10.

Outline the main features of the pituitary-adrenal system.

_____

_____

_____

_____

_____

_____

(Total 3 marks)

Q11.

The following are features of the pituitary-adrenal system and the sympathomedullary pathway.

Tick the boxes next to **three** features of the sympathomedullary pathway.

Noradrenaline	☐
Pituitary gland	☐
Adrenal cortex	☐
Adrenal medulla	☐
Sympathetic nervous system	☐

(Tick three boxes only)

(Total 3 marks)

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