



GCE A LEVEL MARKING SCHEME

SUMMER 2018

A LEVEL (NEW) PSYCHOLOGY - COMPONENT 3 A290U30-1

INTRODUCTION

This marking scheme was used by WJEC for the 2018 examination. It was finalised after detailed discussion at examiners' conferences by all the examiners involved in the assessment. The conference was held shortly after the paper was taken so that reference could be made to the full range of candidates' responses, with photocopied scripts forming the basis of discussion. The aim of the conference was to ensure that the marking scheme was interpreted and applied in the same way by all examiners.

It is hoped that this information will be of assistance to centres but it is recognised at the same time that, without the benefit of participation in the examiners' conference, teachers may have different views on certain matters of detail or interpretation.

WJEC regrets that it cannot enter into any discussion or correspondence about this marking scheme.

A LEVEL PSYCHOLOGY - COMPONENT 3

SUMMER 2017 MARK SCHEME

SECTION A

Implications In The Real World

Addictive Behaviour

1. (a) Natalie likes going to the casino. At first she would go only once a month. Now she goes at least four times a week. She realises she has an addiction to gambling, and is seeking help. Her psychologist has suggested a number of different methods of modifying this behaviour.

Describe **one** method of modifying addictive behaviour with reference to Natalie. [15]

Credit **could** be given for:

Identified on the specification are:

- Agonist and antagonist substitution
- Aversion therapy

The question asks for the description of one. In situations where the candidate has described two methods, examiners should read both and credit the description that allows the candidate to achieve the higher mark.

It is likely that the candidates will describe one of the methods identified from the specification.

Agonist and Antagonist Substitution

<u>Agonist:</u> A treatment that aims to treat individuals through maintenance / substitution treatment systems.

<u>Antagonist:</u> Although a form of treatment as a last resort. Such treatments involve the blocking / limiting of effect of substances on the brain resulting in withdrawal of pleasure.

Aversion Therapy: Clearly illustrated in the film Clockwork Orange, this (ethically questionable) therapy uses conditioning techniques (Classical Conditioning) from the Behaviourist approach to get an individual that might have obsessions or addictions to associate the addicted items / things with something undesirable (e.g. nausea, electric shock). In theory the patient will overtime come to associate the addicted item to the negative experience, and thus recue cravings for addicted item in order to avoid negative experience.

It would be expected in the response that for the candidate to achieve higher bands of marks they will need to explain the process by which aversion therapy works. For example, UCS \rightarrow UCR, NS+ UCS \rightarrow UCR, CS \rightarrow CR.

NB: Any other appropriate method of modifying would be credited.

Mark	AO1
9-10	 Descriptions of one method of modifying addictive behaviours are thorough and accurate. Depth and range included. Effective use of terminology throughout. Logical structure.
6-8	 Descriptions of one method of modifying addictive behaviour are reasonably detailed and accurate. There is depth and range, but not in equal measure. Good use of terminology. Mostly logical structure.
3 – 5	 Descriptions of one method of modifying addictive behaviour are basic. Depth or range. Some use of appropriate terminology. Reasonable structure.
1–2	 Description of one method of modifying addictive behaviour is superficial. Very little use of appropriate terminology. Answer lacks structure.
0	Inappropriate answer given.No response attempted.

AO2

Credit **could** be given for:

Application to the scenario of Natalie:

- Through the description made of the modification technique reference to Natalie and what she might need to do help combat her addictive behaviour.
- As descriptive components of the therapy are made, application of these to Natalie.
- Use of Natalie to give examples of descriptive aspects of the therapy.

Marks	AO2	
5	 Modification used is thoroughly applied to the scenario (Natalie gambling) throughout. The evidence used is well-chosen and applied effectively to the example of Natalie's gambling. The details / reference to scenario are accurate. 	
4-3	 Modification used is reasonably applied to the scenario (Natalie gambling) although there are some aspects which are not applied. Appropriate evidence used and applied to the example of Natalie gambling. The details are mostly accurate. 	
1-2	 Modifications used show superficial application to the scenario (Natalie gambling). Evidence used but not superficially linked to the example of Natalie's gambling. 	
0	 Modifications are not applied to the scenario (Natalie gambling). No attempt at application. 	

(b) Evaluate **two** individual differences explanations of addictive behaviour. [10]

AO3		
Credit could be awarded for:		
It is very likely that evaluative commentary will focus on or around those identified by the specification and thus could relate to personality or cognitive biases or field dependence.		
 Indicatively evaluative commentary might focus here on: Supporting evidence, Griffiths (1994) Cognitive Biases; Guangheng Dong <i>et al.</i> (2013) Personality. Evidence Against: Rozin <i>et al.</i> (1993) - Personality; Methodological issues of the Griffiths study that impinges on the validity of the research findings of cognitive biases. Evaluation could also be extended by ignorance of individual difference explanations of biological factors that underpin the behaviour (e.g. dopamine or addiction genes). Ignorance of social psychological factors (peer influence or role of the media) which might equally have a profound influence on the showing of addictive behaviours. Methodological criticisms of studies that are used to support explanations is a valid form of evaluation - only if the evaluation is linked back its impact on the validity of the explanation. Any other appropriate individual differences explanation of addictive behaviour. 		
Marks	AO3	
9-10	 Thorough evaluation is made of two individual differences explanations of addictive behaviour. Structure is logical. An appropriate conclusion is reached based upon evidence presented. 	
6-8	 Reasonable evaluation is made of two individual differences explanations of addictive behaviour. Structure is mostly logical. A reasonable conclusion is reached based upon the evidence presented. 	
3-5	 Basic evaluation is made of two individual differences explanations of behaviour. Structure is reasonable. A basic conclusion is reached. OR Evaluation of one individual differences explanation of addictive behaviour is thorough and accurate. Logical structure. An appropriate conclusion is reached based upon evidence presented. 	
1-2	 Superficial evaluation of two individual differences explanations of addictive behaviour. Answer lacks structure. There is no conclusion. OR Description of one individual differences explanation of addictive behaviour is reasonably detailed and accurate. Mostly logical structure. A reasonable conclusion is reached based upon the evidence presented. 	
0	Inappropriate answer given.No response attempted.	

Autistic Spectrum Behaviours

2 (` _\	Outline the characteristics of autistic spectrum behaviour.	[10]
Z. (*	a)		

Credit **could** be given for:

- Prevalence in males rather than females. Its incidence (approx. one in 1000 people)
- Limited imagination
- Poor / limited speech development
- Intolerance to change
- High level of specialism in certain intellectual tasks
- Irregular / unusual responses to stimuli / situations
- Very repetitive / ritualistic behaviour
- Social and emotional reciprocity
- Non-verbal communication
- Relationship formation / maintenance difficulties.
- Any other relevant characteristics of autistic spectrum behaviour.

There is an implicit expectation in this question that the candidate provides more than one characteristic. If the candidate only provides one, it is not likely to exceed the bottom of the 1 - 2 mark band.

Examiners need to be sensitive to a depth versus breadth trade –off here. It is possible that some candidates with select only a few characteristics and describe these in depth, where as other might select a broader range but give less detail. Both approaches are acceptable, and should allow the candidate to achieve the full range of marks.

The better answers will be those that do not just provide a list like response, but add depth by example of the characteristics they describe.

Marks	A01
9-10	 Descriptions the characteristics of ASD are thorough and accurate. Depth and range included. Effective use of terminology throughout. Logical structure.
6-8	 Descriptions of the characteristics of ASD are reasonably detailed and accurate. There is depth and range, but not in equal measure. Good use of terminology. Mostly logical structure.
3–5	 Descriptions of the characteristics of ASD are basic. Depth or range. Some use of appropriate terminology. Reasonable structure.
1–2	 Description of the characteristics of ASD are superficial. Very little use of appropriate terminology Answer lacks structure.
0	Inappropriate answer given.No response attempted.

(b) 'Biological explanations are the best way of explaining autistic spectrum behaviours.'

From your study of autistic spectrum behaviours discuss to what extent this statement true? [15]

Credit **could** be given for:

Candidates are likely to select from explanations identified on the specification:

Amygdala dysfunction:

The amygdala has a powerful influence on the activity of the brain. Focus has been in two main areas:

- (1) Amygdala development with a focus on the way in which growth volume of the amygdala increases earlier in children with ASD compared to those without ASD. It is this very unusual developmental growth may affect neural organisation, resulting in problems in functioning and behavioural changes.
- (2) Amygdala dysfunction theory Abnormal development of the amygdala (which has many neural connections to the frontal cortex) may account for many of the characteristics social and behaviour problems often found in individuals with ASD.

Chloride ions at birth:

The suggestion that high levels of salt in the nerve cells of new-born babies may be an important early trigger to latter ASD. Basically, high levels of chloride (a negatively charged salt ion found in nerve cells) may orientate the brain of a new born towards autistic tendencies. While Chloride ions are kept high in the neurons of the foetus while developing in the womb. When born chloride levels of quickly lowered and controlled by oxytocin (a birth hormone released by the mother during labour).

Genetic predisposition:

The argument is that factors in the genetic makeup of an individual could influence the likelihood of them developing ASD. Varied research has been carried out involving family studies (e.g. Szatmari, 1999), twin studies (such as that conducted by (Bailey *et al.* (1995). Extending this Bernier *et al.* (2012) have focussed on slightly different influences suggesting that not all families affected by ASD are the same – he differentiates between simplex and multiplex ASD. Finally contribution to the genetic focus has also centred around syndromic and non-syndromic ASD, in the latter case it is not clear what the genetic aetiology is.

Examiners should be aware that the question will allow for reference to Biological and non-biological explanations of ASD - by means of establishing the alternative side of the argument. Candidates that do not make reference alternative explanations which are not biological are presenting only one side of a debate. Thus the candidate is unlikely to score higher than 3 - 5 marks (basic) for AO3 depending on the nature and structure of the response.

The focus of the response could examine:

- Candidates may use Psychological explanations to illustrate that the biological explanation can't be the best way of providing explanation for Autism since important psychological factors are being ignored.
- Ignorance of individual difference / social psychological content detracts from the effectiveness of the biological explanation.
- Research evidence supporting biological focus such as those relating to amygdala dysfunction, chloride ions at birth and genetic predisposition.
- Research / comments that illustrate the limitation of Individual difference / social psychological explanations (hence illustrating the strength of biological explanation).

Marks	AO2	
5	 Commentary is thoroughly applied to the statement throughout. The evidence used is well – chosen and applied effectively to the statement. There is depth and range to the evidence used. The details / reference to statement is accurate. 	
3-4	 Commentary used is reasonably applied to the statement although there are some aspects which are not applied. Appropriate evidence used and applied to the statement. There is depth or range to the evidence used. The details are mostly accurate. 	
1-2	 Commentary used shows superficial application to the statement. Evidence used but not superficially linked to the statement. 	
0	Commentary made is not applied to the statement.No attempt at application.	
Marks	AO3	
9-10	 A thorough evaluation is made of the biological explanations for ASD. Structure is logical. An appropriate conclusion is reached based upon evidence presented. 	
6–8	 A reasonable evaluation is made of the biological explanations for ASD. Structure is mostly logical. A reasonable conclusion is reached based upon the evidence presented. 	
3-5	 Basic evaluation is made of the biological explanations of ASD. Structure is reasonable. A basic conclusion is reached. 	
1-2	 Superficial evaluation of the biological explanations of ASD Answer lacks structure. There is no conclusion. 	
0	Inappropriate answer given.No response attempted.	

Bullying Behaviour

•	()		54.03
3.	(a)	Outline the characteristics of bullying behaviours.	[10]

Credit **could** be given for:

It is likely that most candidates will use the noted characteristics by Dan Olweus (1993). He noted how bullying occurs when "an individual (or group) subjects another individual (or group) to repeated negative acts". The most common way to examine the characteristics of bullying is in the following five key ways:

- 1. Bullying involves negative acts (including physical, verbal, and social exclusion).
- 2. The behaviour is repeated (not just a single one-off event).
- 3. Intention to harm (action is not by accident).
- 4. Bully has greater power (either by age, height, knowledge, physical strength etc.).
- 5. Different types of bullying (overt / covert).
- Any other appropriate characteristic of bullying behaviours.

The question refers to characteristics. There is an expectation that more than one will be stated. Where a candidate only outlines only one, the candidate will not exceed 1-2 marks.

Marks	AO1
9-10	 Outline of characteristics of bullying behaviour is thorough and accurate. Depth and range included. Effective use of terminology throughout. Logical structure.
6-8	 Outline of characteristics of bullying behaviour is reasonably detailed and accurate. There is depth and range, but not in equal measure. Good use of terminology. Mostly logical structure.
3–5	 Outline of characteristics of bullying behaviour is basic. Depth or range. Some use of appropriate terminology. Reasonable structure.
1–2	 Outline of characteristics of bullying behaviour is superficial. Very little use of appropriate terminology Answer lacks structure.
0	Inappropriate answer given.No response attempted.

(b) 'Individual differences explanations of bullying are an effective means of explaining bullying behaviour'.

With reference to this statement, evaluate individual differences explanations of bullying behaviour. [15]

Credit **could** be given for:

It is likely that the range of responses for this question will largely be within the focus of the specification.

• Individual differences (narcissistic personality, theory of mind)

There are a range of ways in which evaluation could be effectively constructed:

- Presentation of research evidence to illustrate support explanations Kokkino's (2006) Narcissistic personality; Gini (2006) Theory of mind; real world applications etc.
- Presentation of research evidence refuting explanations. (e.g. Diathesis stress raising the issue of not being able to explain bullying just through nature alone; validity of bullying research through problematic definitions of both bullying and narcissistic behaviour; lack of appreciation of understanding moral emotions that can impact upon behaviour (rather than just moral disengagement). Studies that are used to support other explanations can be used as evidence against the explanation being evaluated (e.g. Ball (2008) genetic influences; Leenaars (2008) evolved gender differences; Chester (2015) Cultural difference; Hymel *et al.* (2005) Moral disengagement);
- Comparative comments made from looking at alternative explanations. (E.g. the benefits of using biological explanations such as being able to clearly explain gender difference in bullying behaviour through evolutionary difference over psychological ones such as culture.
- Any other relevant evaluation points.

The question requests an evaluation of two explanations. Simple descriptions of two different explanations of bullying behaviour receive no credit. Those responses that do this followed by limited evaluation of them are likely not to score over the 1–2 band.

NB: Evaluation of the psychological approaches upon which the explanation is based upon is acceptable but must be contextualised to the explanation of bullying behaviour.

Marks	AO3
9-10	 A thorough evaluation is made of individual differences explanations of bullying behaviour. Structure is logical. An appropriate conclusion is reached based upon evidence presented.
6–8	 A reasonable evaluation is made of individual differences explanations of bullying behaviour. Structure is mostly logical. A reasonable conclusion is reached based upon the evidence presented.
3-5	 Basic evaluation is made of individual differences explanations of bullying behaviour. Structure is reasonable. A basic conclusion is reached.
1-2	 Superficial evaluation of evaluation is made of individual differences explanations of bullying behaviour. Answer lacks structure. There is no conclusion.
0	Inappropriate answer given.No response attempted.

Credit **could** be given for:

Reference to the statement through comments made:

- Strengths and weaknesses of the explanations that can be used to support (or refute) the quotation.
- Assessment of the quotation in the light of research / conclusions drawn from different explanations.
- Direct comments reflecting effectiveness.

Marks	AO2
5	 Evaluation is thoroughly applied to the statement throughout. The evidence used is well – chosen and applied effectively to the statement. Depth and range of material. Details are accurate.
4-3	 Evaluation used is reasonably applied to the statement although there are some aspects which are not applied. Depth or range of material. Appropriate evidence used and applied to the statement. Details are mostly accurate.
1-2	 Evaluation used shows superficial application to the statement. Evidence is described but not applied. There may be some inaccuracies throughout.
0	Commentary made is not applied to the statement.No attempt at application.

Criminal Behaviours

4. (a) Describe **one** social psychological explanation of criminal behaviour. **[10]**

Credit **could** be given for:

It is very likely that candidates will tend to focus and choose from those identified from the specification. These are:

- Differential association theory
- Gender socialisation
- Normalisation theory
- The Differential Association theory basically suggests that criminal behaviour can be explained in terms of processes of social learning (observation and imitation of behaviour). By mixing with people who have favourable / similar attitudes as you, you are more likely to be influenced by them, and therefore show similar (criminal) behaviours.
- Gender socialisation explains criminality in terms of the process by which we learn norms, customs and behaviours that allow us to function in society. Through observational learning of (same sex) role models gendered behaviours result. Differences in the freedom surrounding male and female social movement also places more restraint on females than males offering them a greater potential (then females) to participate in criminal activity.
- Normalisation theory suggests that if a (criminal) behaviour is shown by a majority within a group those that do not show that behaviour become the "deviants" and those tend to go along with the behaviour as it increasing appears normal for that group to show.
- Any other appropriate social psychological explanation of criminal behaviour.

NB: In situations where the candidate has described two explanations, examiners should read both and credit the explanation that allows the candidate to achieve the higher mark.

PMT

Marks	AO1
9-10	 Description of one social psychological explanation of criminal behaviour is thorough and accurate. Depth and range included. Effective use of terminology throughout. Logical structure.
6-8	 Description of one social psychological explanation of criminal behaviour is reasonably detailed and accurate. There is depth and range, but not in equal measure. Good use of terminology. Mostly logical structure.
3-5	 Description of one social psychological explanation of criminal behaviour criminal behaviour is basic in detail, and there may be some inaccuracies. Depth or range. Some use of appropriate terminology. Reasonable structure.
1-2	 Description of one social psychological explanation of criminal behaviour criminal behaviour is superficial. Very little use of appropriate terminology. Answer lacks structure.
0	Inappropriate answer given.No response attempted.

PMT

(b) 'Criminality is the clear outcome of biological processes'.

Evaluate biological explanations of criminal behaviour with reference to this statement. [15]

Credit can be given for AO2:

Reference to the quotation through comments made:

- Strengths and weaknesses of the explanations that can be used to support (or refute) the statement.
- Assessment of the quotation in the light of research / conclusions drawn from different explanations.

Marks	AO2
5	 Evaluation is thoroughly applied to the statement throughout. The evidence used is well – chosen and applied effectively to the statement. Details are accurate.
3-4	 Evaluation used is reasonably applied to the statement although there are some aspects which are not applied. Appropriate evidence used and applied to the statement. Details are mostly accurate.
1-2	 Evaluation used shows superficial application to the statement. Evidence is described but not applied. There may be some inaccuracies throughout.
0	Commentary made is not applied to the statement.No attempt at application.

Credit **could** be given for:

Evaluation could take the form of:

It is likely that the range of responses for this question will largely be within the focus of the specification:

• Biological explanations (inherited criminality; amygdala; disinhibition hypothesis)

There are a range of ways in which evaluation could be effectively constructed:

- Presentation of research evidence to illustrate support explanations Crowe (1972) inherited criminality; Gospic (2011) Role of amygdala; real world applications etc.
- Presentation of research evidence refuting explanations. (E.g. Diathesis stress raising the issue of not being able to explain bullying just through nature alone. Studies that are used to support other explanations can be used as evidence against the explanation being evaluated (e.g. Dunlop *et al.* (2012) personality traits; Schonenberg et al (2014) cognitive factors; Osborne et al differential association; or social factors associated with gender socialisation such as Pollak (1950 or Carlen (1997)
- Comparative comments made from looking at alternative explanations which emphasis the issues being ignored by the biological explanations that are clearly a focus on other explanations.
- Any other relevant evaluation points.

Marks	AO3
9-10	 Thorough evaluation is made of biological explanations of criminal behaviour. Depth and range of material. Structure is logical. An appropriate conclusion is reached based upon evidence presented.
6–8	 Reasonable evaluation is made of biological explanations of criminal behaviour. Depth and range but not in equal measure. Structure is mostly logical. A reasonable conclusion is reached based upon the evidence presented.
3-5	 Basic evaluation is made of biological explanations of criminal behaviour. Depth or range. Structure is reasonable. A basic conclusion is reached.
1-2	 Superficial evaluation of biological explanations of criminal behaviour. Answer lacks structure. There is no conclusion.
0	Inappropriate answer given.No response attempted.

Schizophrenia

5. (a) Ronald has not been feeling the same lately. He told his friend Rory what he has been experiencing. Rory suggested that the behaviours Ronald is showing could be characteristics of schizophrenia.

Describe the characteristics of schizophrenia that Ronald may have told Rory he was experiencing. [15]

Credit **could** be given for:

The characteristics of schizophrenia are largely split between to two groups of symptoms:

- Positive
- Negative

It would be expected for higher band responses to provide a thorough account of both symptoms, illustrating, and giving examples of these (thus achieving both depth and range).

Positive Symptoms:

- Hallucinations (Visual, auditory, tactile etc.)
- Dellusions (control, grandeur, reference, persecution).
- Formal Thought Disorder (Disordered Thinking) (neologisms, clanging, loose associations etc.).

Negative Symptoms:

- Alogia (poverty of speech).
- Avolition (apathy they would previously have taken part in).
- Anhedonia (inappropriate reaction to previously pleasurable experiences).
- Flatness of affect (apparent no emotion).
- Catatonic behaviour (varied bodily movement ranging from a stupor, to fast repetitive movement, to the mimicking of other behaviour around them (echopraxia). Any other appropriate characteristic of schizophrenia.

Marks	AO1
9-10	 Descriptions of the characteristics of schizophrenia are thorough and accurate. Depth and range included. Effective use of terminology throughout. Logical structure.
6-8	 Descriptions of the characteristics of schizophrenia are reasonably detailed and accurate. There is depth and range, but not in equal measure. Good use of terminology. Mostly logical structure.
3-5	 Description of the characteristics of schizophrenia are basic in detail, there may be some inaccuracies. Depth or range. Some use of appropriate terminology. Reasonable structure.
1-2	 Descriptions of the characteristics of schizophrenia are superficial. Very little use of appropriate terminology. Answer lacks structure.
0	Inappropriate answer given.No response attempted.

Credit **could** be given for:

Reference to the scenario of Ronald or Rory made through:

- References to Ronald or Rory as the characteristics are described.
- Making reference to Ronald / behaviours he might have shown as examples of the characteristics being described.

Marks	AO2
5	 Description is thoroughly applied to Ronald or Rory throughout. The evidence used is well – chosen and applied effectively to the statement. There is depth and range to the evidence used. The details / reference to statement are accurate.
3-4	 Description used is reasonably applied to Ronald or Rory although there are some aspects which are not applied. Appropriate evidence used and applied to Ronald. There is depth or range to the evidence used. The details are mostly accurate.
1-2	 Description used shows superficial application to Ronald or Rory. Evidence used but not superficially linked to Ronald.
0	Description made is not applied to Ronald or Rory.No attempt at application.

(b) Evaluate social psychological explanations of schizophrenia.

[10]

Credit **could** be given for:

Evaluation could take the form of:

It is likely that the range of responses for this question will largely be within the focus of the specification:

• Social-psychological explanations (dysfunctional families; cultural norms; expressed emotion).

There are a range of ways in which evaluation could be effectively constructed:

- Presentation of research evidence to illustrate support explanations Liem (1974) Dysfunctional families [double bind], Vaughn and Leff (1976) – Dysfunctional families [expressed emotion]. Van Os (2005) Socio-cultural factors [urbanicity]; Jones et al (1994) Socio-cultural factors [social isolation]; real world applications etc.
- Presentation of research evidence refuting explanations. (E.g. Diathesis stress raising the issue of not being able to explain schizophrenia just through nature alone. Studies that are used to support other explanations can be used as evidence against the explanation being evaluated e.g. Heston (1966) – Genetic; McCarley (1999) Structural abnormalities; Kasanin *et al.* (1934) - Maternal overprotection; Barch et al (1999) Cognitive explanation.
- Comparative comments made from looking at alternative explanations which emphasis the issues being ignored by the social psychological explanations that are clearly a focus on other explanations.
- Any other relevant evaluation points.

Marks	AO3
9-10	 A thorough evaluation is made of social psychological explanations of schizophrenia. Depth and range of material. Structure is logical. An appropriate conclusion is reached based upon evidence presented.
6–8	 A reasonable evaluation is made of social psychological explanations of schizophrenia. Depth and range of material, but not in equal measure. Structure is mostly logical. A reasonable conclusion is reached based upon the evidence presented.
3-5	 Basic evaluation is made of social psychological explanations of schizophrenia. Depth or range of material. Structure is reasonable. A basic conclusion is reached.
1-2	 Superficial evaluation of social psychological explanations of schizophrenia. Answer lacks structure. There is no conclusion.
0	Inappropriate answer given.No response attempted.

Stress

6. (a) Describe two biological explanations for stress

[10]

Credit **could** be given for:

It is likely that candidates will select from those identified from the specification:

- Adrenaline
- Evolutionary adaptation
- Stress genes
- Adrenaline is a hormone secreted from the adrenal glands in response to stress and forms part of a complex system the sypathomedullary pathway which is initiated when the person perceives a threat, and the hypothalamus initiates a response via the autonomic nervous system. The sympathetic branch of the ANS signals to the adrenal gland for the hormones adrenaline and noradrenaline to be released. When the stressor has gone the parasympathetic branch of the ANS initiates a dampening effect on the stress response system.
- Evolution also impacts upon stress response. The stress response system is thought to have helped our ancestors deal with threats. While such a system is effective and useful, in today's society the stressors that we face (unlike our ancestors) have a tendency of being long term depleting body resources and having deleterious effects on the body and health of the individual.
- Research has also suggested that a stress gene can also be linked to individual response to and ill-health from stress (Williams, 2013).

Marks	AO1
9-10	 Description of two biological explanations of stress are thorough and accurate. Effective use of terminology throughout. Logical structure.
6-8	 Description of two biological explanations of stress are reasonably detailed and accurate. Good use of terminology. Mostly logical structure.
3-5	 Description of two biological explanations of stress are basic in detail, there may be some inaccuracies. Some use of appropriate terminology. Reasonable structure. OR Description of one biological explanation of stress is thorough and accurate. Effective use of terminology throughout. Logical structure.
1-2	 Description of two biological explanations of stress are superficial. Very little use of appropriate terminology. Answer lacks structure. OR Description of one biological explanations of stress is reasonably detailed and accurate. Good use of terminology. Mostly logical structure.
0	Inappropriate answer given.No response attempted.

(b) Mehdi is highly stressed about his examinations, driving test and other personal issues. Various methods of modifying this behaviour have been suggested to him.

Evaluate **one** method of modifying Mehdi's stress.

[15]

Credit **could** be given for:

This question requires the candidates to evaluate. Responses that are purely descriptive do not gain credit. It is likely that the candidates will tend to choose form those methods of modification that are found on the specification:

- Beta Blockers
- Stress inoculation training

There are a range of ways in which evaluation could be effectively constructed:

- Presentation of research evidence to illustrate support the method of modifying behaviour being evaluated – for example: Beta Blockers - Neftal *et al.* (1982); Schwabe *et al.* (2011). Stress inoculation training – Saunders *et al.* (1996), Blumenthal *et al.* (2002)
- Presentation of contrary evidence for example: Issue of long term effectiveness of BB, side effects of BB, Schweizer *et al.* (1991). Stress inoculation training Foa *et al.* (1991, 1999); Kienan *et al.* (1996), varied ethical implications.
- Comparative comments made from looking at alternative methods emphasising aspects that are ignored.
- Any other relevant evaluation points.

Marks	AO3
9-10	 Thorough evaluation is made of one method of modifying stressful behaviour. Structure is logical. An appropriate conclusion is reached based upon evidence presented.
6–8	 Reasonable evaluation is made of one method of modifying stressful behaviour. Structure is mostly logical. A reasonable conclusion is reached based upon the evidence presented.
3-5	 Basic evaluation is made of one method of modifying stressful behaviour. Structure is reasonable. A basic conclusion is reached.
1-2	 Superficial evaluation of one method of modifying stressful behaviour. Answer lacks structure. There is no conclusion.
0	Inappropriate answer given.No response attempted.

Credit can be given for AO2:

Reference to the Mehdi through comments made about:

- Strengths and weaknesses of the explanations.
- Mehdi referred to through the evaluative points made.
- Mehdi as an example / referred to as an example as evaluative contributions made.

Marks	AO2
5	 Commentary is thoroughly applied to Mehdi throughout. The evidence used is well – chosen and applied effectively to the statement. There is depth and range to the evidence used. The details / reference to statement are accurate.
3-4	 Commentary used is reasonably applied to Mehdi although there are some aspects which are not applied. Appropriate evidence used and applied to Mehdi. There is depth or range to the evidence used. The details are mostly accurate.
1-2	 Commentary used shows superficial application to Mehdi. Evidence used but not superficially linked to Mehdi.
0	Commentary made is not applied to Mehdi.No attempt at application.

SECTION B Controversies

Answer one of the questions

7. 'Psychological research is culturally biased'.

Using your knowledge of Psychology discuss the extent to which this statement is true. [25]

This question is synoptic, and therefore the material used by candidates in this debate can be drawn from any area of Psychology. Examiners should expect candidates to draw on psychological concepts, research, evidence, studies or theories from any approach studied in their course.

Candidates **could** refer to:

A clear and consistent reference to the quotation through:

- Judging if psychology is culturally biased through comparison to other disciplines.
- Examining research that is and is not cross cultural (ethnocentric).
- Examining origins of psychological research from singular cultures.
- Impact of cultural bias on the psychological approaches.
- Other relevant examples that contribute to this debate from different areas of study.

Mark	AO2
9-10	 Evidence used is well-chosen. Details are accurate throughout. There is depth and range to material. Effective use of terminology. Clear reference to the statement.
6-8	 Evidence used is appropriate. Details may have minor inaccuracies. There is depth and range to material, but not in equal measure. Good use of terminology. Reasonable reference to the statement.
3-5	 Evidence used is not always made relevant to comments made. There may be significant inaccuracies. There is depth or range only in material used. There is some use of appropriate terminology. References to the statement are basic and/or superficial.
1-2	 Evidence used is not appropriate to the comments made. Very little use of appropriate terminology. No reference to the statement.
0	Inappropriate answer given.No response attempted.

Indicative direction of argument **might** be:

Supporting Argument

- The relative cost of cross-cultural research making such techniques not possible in every instance.
- Sheer range of research conducted in Psychology that is ethnocentric.
- The fact that research represents particular historical or social contexts.
- Clear evidence of beta bias in theories / explanations in Psychology.
- Any other appropriate evaluation point

Against Argument

- Reference to and analysis of studies / research that have been conducted cross culturally.
- Is psychology biased or simply showing that difference exists between cultures?
- Increasingly non-western societies, now contribute towards the academic discipline of Psychology, gradually the subject is becoming less ethnocentric.
- Tests / procedures that used (e.g. IQ) that used be culturally biased are now culture free.
- Any other appropriate evaluation point.

An overall conclusion is expected. The points above are indicative of content, but any other points that appropriately add to the discussion should be credited appropriately.

Marks	AO3
13-15	A sophisticated and articulate interpretation of the issue.
	Thoroughly well developed and balanced discussion.
	Evaluative comments are evidentially relevant to the context.
	Structure is logical.
	An appropriate conclusion is reached based on the evidence presented.
	A thorough interpretation of the key issue.
	Discussion is well-developed and balanced.
10-12	The evaluative comments are clearly relevant to the context.
	Structure is mostly logical.
	A reasonable conclusion is reached based upon the analysis of evidence.
	A reasonable interpretation of the key issue.
	Discussion is reasonable but may be one-sided.
7-9	• The evaluative comments made tend to be generic (not in context).
	Structure is reasonable.
	A basic conclusion is made based on the analysis of the evidence.
	May be some misinterpretation regarding the key issue.
	Discussion is basic but creditworthy.
4-6	Answer does not move beyond assertions.
	Structure is basic.
	Any conclusion may be contradictory with the flow of the answer.
	• There is no engagement with the issue beyond simple rewording.
	Limited discussion or no sense of argument.
1-3	Limited or no evaluation
	Answer lacks structure.
	No conclusion.
0	Inappropriate answer given.
	No response attempted.

8. 'Using non-human animals in psychology is useful but also problematic.' To what extent do you agree with this statement? Justify your answer using psychological knowledge.

[25]

This question is synoptic, credit should therefore be given for content from across the range of concepts, theories, research and approaches studied in the course. Furthermore it is important for examiners to ensure that the evidence used by candidates is used appropriate and linked to the statement made.

Candidates will be expected to make reference to the quotation. In so doing they might:

- Establishing / judging is useful / problematic or both.
- Examining research / drawing reference to research which illustrates that non-human animal research in psychology can be useful.
- Examining research / drawing reference to research which illustrates that non-human animal research in psychology can be problematic.
- Examining / drawing reference to the impact of such research in wider society.
- Other relevant examples that contribute to this debate from different areas of study.

Mark	AO2
9-10	 Evidence used is well-chosen. Details are accurate throughout. There is depth and range to material. Effective use of terminology. Clear reference to the statement.
6-8	 Evidence used is appropriate. Details may have minor inaccuracies. There is depth and range to material, but not in equal measure. Good use of terminology. Reasonable reference to the statement.
3-5	 Evidence used is not always made relevant to comments made. There may be significant inaccuracies. There is depth or range only in material used. There is some use of appropriate terminology. References to the statement are basic and/or superficial.
1-2	 Evidence used is not appropriate to the comments made. Very little use of appropriate terminology. No reference to the statement.
0	Inappropriate answer given.No response attempted.

This question is focused mainly on analysing, interpreting and evaluating scientific information, ideas and evidence, including in relation to issues, to develop and refine practical design and procedures.

Indicative direction of argument might be:

Supporting Argument

- Such research can be useful especially given the very clear structures set out by the BPS with regard non-human animal testing. Legislation (Animal Act) provide a safe and clear structured set of rules and regulations meaning that needless experiments are avoided.
- Research involving animals to better human life experience e.g. animals as a therapeutic device. (for example Allen (2003))
- Research involving animals can lead to benefit humans in terms of their experience of psychopathological disorders (e.g. depression, schizophrenia). Research can identify possible causes and establish if treatments can reduce the severity of symptoms and thus reduce the impact of the disorder.
- Ethological study research involving non-human animals has limited impact on animals being observed (1935).

Against Argument

- Animals are animals and not humans so experimental research findings are only limited to the animal being tested - generalisation to humans is difficult if not possible. Meaning that the importance of such findings are reduced and the pain / suffering the animal has ensured is needless. Candidates can inform this view by reference to research studies that have been conducted on animals: e.g. research into dopamine hypothesis in schizophrenia (e.g. Randrup and Munkvad (1966)) etc.
- Pure issue of animal rights. Is it ethically appropriate to make use of animals in research simply because there are less complex species than ourselves? Some would argue e.g. Tom Regan (1984) that there is no circumstance in which an animal should be tested even if it is for the betterment of human life.
- Some research has been ethically questionable and seen as detrimental to the animals concerned. Is the long lasting impact of such studies worthwhile? For example Harry Harlow's research into attachment of young monkeys.
- Varied research that illustrates the distress, harm, and limited protection given to non-human animals in research in varied aspects of psychology. Examples can be used across different topics in Psychology - (E.g. Stress - Executive Monkey Study -Brady 1957) etc.

An overall conclusion is expected.

The points above are indicative of content, but any other points that appropriately add to the discussion should be credited appropriately.

Marks	AO3
13-15	 A sophisticated and articulate interpretation of the issue. Thoroughly well developed and balanced discussion. Evaluative comments are evidentially relevant to the context. Structure is logical. An appropriate conclusion is reached based on the evidence presented.
10-12	 A thorough interpretation of the key issue. Discussion is well-developed and balanced. The evaluative comments are clearly relevant to the context. Structure is mostly logical. A reasonable conclusion is reached based upon the analysis of evidence.
7-9	 A reasonable interpretation of the key issue. Discussion is reasonable but may be one-sided. The evaluative comments made tend to be generic (not in context). Structure is reasonable. A basic conclusion is made based on the analysis of the evidence.
4-6	 May be some misinterpretation regarding the key issue. Discussion is basic but creditworthy. Answer does not move beyond assertions. Structure is basic. Any conclusion may be contradictory with the flow of the answer.
1-3	 There is no engagement with the issue beyond simple rewording. Limited discussion or no sense of argument. Limited or no evaluation Answer lacks structure. No conclusion.
0	Inappropriate answer given.No response attempted.