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GCE

Psychology A

Unit PYA4

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Unit 4: Social, Physiological, Cognitive, Developmental and Comparative Psychology

Mark allocations for Assessment Objective One

Band	Marking Criteria	Marks
3	<p><i>At the top of the band</i> psychological content is accurate and well-detailed at the level of knowledge, description and understanding. the organisation and structure are presented coherently. there is substantial evidence of breadth and depth and a balance between them has been achieved.</p> <p><i>at the bottom of the band</i> slightly limited psychological content is cited, which is accurate and well-detailed at the level of knowledge, description and understanding. the organisation and structure are presented coherently. there is evidence of breadth and depth although a balance between these is not always achieved.</p>	12 - 9
2	<p><i>At the top of the band</i> limited psychological content is cited, which is accurate and reasonably detailed at the level of knowledge, description and understanding. the answer is reasonably constructed in its attempt to answer the question. there is some evidence of breadth and/or depth.</p> <p><i>at the bottom of the band</i> limited psychological content is cited which is generally accurate at the level of knowledge, description and understanding but lacking in detail. the answer is reasonably constructed in its attempt to answer the question. there is some evidence of breadth and/or depth.</p>	8 - 5
1	<p><i>At the top of the band</i> there is basic psychological content, rudimentary and sometimes flawed description. the answer is sometimes focused on the question but may be irrelevant or superficial.</p> <p><i>at the bottom of the band</i> the psychological content is just discernible and the views expressed may be largely ‘anecdotal psychology’, and/or the candidate makes inaccurate assertions about the subject of the question. description is weak and understanding is muddled and incomplete. the answer may be wholly or mainly irrelevant to the problem it addresses.</p>	4 - 0

Mark Allocations for Assessment Objective Two

Band	Marking Criteria	Marks
3	<p><i>At the top of this band</i> commentary is informed and thorough in terms of analysis, evaluation and interpretation of relevant psychological theories, concepts, evidence or applications. material has been used in a highly effective manner and shows evidence of appropriate selection and coherent elaboration.</p> <p><i>at the bottom of this band</i> commentary is slightly limited in terms of analysis, evaluation and interpretation of relevant psychological theories, concepts, evidence or applications. material has been used in an effective manner and shows evidence of appropriate selection and coherent elaboration.</p>	12 - 9
2	<p><i>At the top of this band</i> commentary is reasonable but limited in terms of analysis, evaluation and interpretation of relevant psychological theories, concepts, evidence or applications. material has been used in an effective manner and shows evidence of coherent elaboration.</p> <p><i>at the bottom of this band</i> commentary is reasonable but limited in terms of analysis, evaluation and interpretation of relevant psychological theories, concepts, evidence or applications. material has been used in a reasonably effective manner, and shows some evidence of elaboration.</p>	8 - 5
1	<p><i>At the top of this band</i> commentary is minimal, superficial and rudimentary in terms of analysis, evaluation of psychological theories, concepts, evidence or applications. material used is of a restricted nature and provides minimal interpretation.</p> <p><i>at the bottom of this band</i> the psychological content is just discernible. analysis is weak and evaluation is muddled and incomplete. the answer may be wholly or mainly irrelevant to the problem it addresses.</p>	4 - 0

Quality of Written Communication (QoWC)

Band 5	The work is characterised by the accurate and clear expression of ideas and the precise use of a broad range of specialist terms. only minor (if any) errors in grammar, punctuation and spelling.	4 marks
Band 4	The work is characterised by a reasonably accurate expression of ideas, the use of a good range of specialist terms and few errors of grammar, punctuation and spelling.	3 marks
Band 3	The work is characterised by a coherent expression of ideas, the use of some specialist terms and reasonable grammar, punctuation and spelling.	2 marks
Band 2	The work is characterised by an adequate expression of ideas, the use of a reasonable range of specialist terms and adequate grammar, punctuation and spelling.	1 mark
Band 1	The work is characterised by y	0 marks

Section A: Social Psychology

1

Total for this question: 24 marks

Critically consider two or more errors and/or biases in the attribution process (e.g. self-serving bias, fundamental attribution error). (24 marks)

Marking criteria

Critically consider is an **AO1** and **AO2** term, which requires the candidate to both describe and evaluate two or more errors and/or biases in the attribution process.

AO1

An attributional bias can be defined as a distortion in perception or judgement about the causes of our own or other people's behaviour. The distinction between an *error* and a *bias* is based on our interpretation of the nature of an attribution, hence the use of both terms in the question. There are a number of such errors/biases that might be used here. These included the fundamental attribution error/bias, actor-observer differences and self-serving biases. It is perfectly acceptable for students to write about 'sub-categories' of these biases, therefore some students may choose to write about 'self-enhancing and self-protecting biases', 'group serving bias' or perhaps the 'ultimate attribution error'. Candidates who write about two 'sub-categories' of an attributional error/bias only, are satisfying the requirement to write about 'two or more' therefore should not be penalised for partial performance. In the **AO1** component of this question, candidates may write about the *nature* of the attributional error/bias being described, or perhaps offer an *explanation* of it. Research studies may be used to illustrate the error/bias in question. Weaker answers may show an over-reliance on real-life examples in lieu of any sustained psychological description of the error or bias in question.

AO2

The **AO2** part of this question can be satisfied in a number of ways. Candidates may, for example, consider research studies that support (or challenge) the existence of a particular error/bias. They might also consider the role of cultural factors in the operation of the error/bias in question. For example, the fundamental attribution error might be seen as an indication of the pervasive individualism of modern Western societies, a cultural 'bias' to perceive causes as internal rather than external to individuals. Likewise, evidence suggests that the pattern of self-serving biases found in individualist societies is not always found in other societies where interdependence is more highly valued than independence.

Some candidates may consider the *application* of knowledge about attributional errors/biases as evidence of their value. For example, research has now firmly established a link between attributional style and depression. This has led to the development of attributional retraining programmes in which depressives are taught how to make more self-serving attributions for their own behaviours. The mere description of such a link, or the programmes themselves would not constitute **AO2** content, but the candidate should make the *value* of this link explicit as an evaluation of the error/bias being considered.

Candidates who describe only one error/bias are only partially performing and should be marked to a maximum of 8/12 (Band 2 – top) for each part of this question.

Question 1: AO1

Description of **two or more** errors and/or biases in the attribution process.

Band	Mark allocation	Marks
Band 3 Top	Description of two or more errors and/or biases in the attribution process is substantial . It is accurate and well-detailed . The organisation and structure of the answer is coherent . There is substantial evidence of breadth and depth and an appropriate balance between them is achieved.	12-11
Band 3 Bottom	Description of two or more errors and/or biases in the attribution process is slightly limited . It is accurate and reasonably detailed . The organisation and structure of the answer is coherent . There is evidence of breadth/depth and whilst there is evidence of breadth and depth , a balance between them is not always achieved.	10-9
Band 2 Top	Description of two or more errors and/or biases in the attribution process is limited . It is generally accurate and reasonably detailed . The organisation and structure of the answer is reasonably constructed . There is increasing evidence of breadth and/or depth. <i>Partial performance is substantial, accurate and well-detailed (top of band) or slightly limited, accurate and reasonably detailed (bottom of band).</i>	8-7
Band 2 Bottom	Description of two or more errors and/or biases in the attribution process is basic . It is generally accurate but lacks detail . The organisation and structure of the answer is reasonable . There is some evidence of breadth and/or depth. <i>Partial performance is limited, generally accurate and reasonably detailed.</i>	6-5
Band 1 Top	Description of two or more errors and/or biases in the attribution process is rudimentary and sometimes flawed . There is some focus on the question. The organisation and structure of the answer is reasonable . <i>Partial performance is basic, generally accurate and lacking detail.</i>	4-3
Band 1 Bottom	Description of two or more errors and/or biases in the attribution process is just discernible . It is weak and shows muddled understanding. The answer may be wholly or mainly irrelevant to the question's requirements. <i>Partial performance is rudimentary and sometimes flawed with little focus on the question.</i>	2-0

Question 1: AO2

Evaluation of **two or more** errors and/or biases in the attribution process.

Band	Mark allocation	Marks
Band 3 Top	Evaluation of two or more errors and/or biases in the attribution process is thorough and there is evidence of appropriate selection and coherent elaboration . The material is used in a highly effective manner.	12-11
Band 3 Bottom	Evaluation of two or more errors and/or biases in the attribution process is slightly limited and there is evidence of appropriate selection and elaboration . The material is used in an effective manner.	10-9
Band 2 Top	Evaluation of two or more errors and/or biases in the attribution process is limited and there is reasonable elaboration . The material is used in a reasonably effective manner. <i>Partial performance is thorough, coherent and highly effective use of material (top of band) or slightly limited and effective use of material (bottom of band).</i>	8-7
Band 2 Bottom	Evaluation of two or more errors and/or biases in the attribution process is basic and there is some evidence of elaboration. The material is used in a restricted manner. <i>Partial performance is limited with reasonable elaboration and reasonably effective use of material.</i>	6-5
Band 1 Top	Evaluation of two or more errors and/or biases in the attribution process is superficial and rudimentary and there is no evidence of elaboration. The material is not used effectively . <i>Partial performance is basic with some evidence of elaboration; restricted use of material.</i>	4-3
Band 1 Bottom	Evaluation of two or more errors and/or biases in the attribution process is muddled and incomplete . The material may be wholly or mainly irrelevant . <i>Partial performance is superficial with no evidence of elaboration; not used effectively.</i>	2-0

Discuss research (theories and/or studies) relating to the formation of relationships. (24 marks)

Marking criteria

Discuss in an **AO1** and **AO2** term which requires the candidate to both describe and evaluate research (theories **and/or** studies) relating to the formation of relationships. In the *Terms used in Examination Question* document, the term ‘research’ is defined as ‘the process of gaining knowledge and understanding via either theory construction, examination, or empirical data collection.

AO1

Appropriate theories might include sociobiological theories, reinforcement theories, and economic theories such as social exchange and equity theories. This question clearly asks for research into the formation of *relationships* rather than explanations of initial attraction. It is possible that some candidates may interpret the question as an opportunity to write about factors involved in initial attraction, such as physical attractiveness, similarity and proximity. Although, strictly speaking, these do not really tell us too much about the two-sided, active interactions that characterise human relationships, there is some relevance to this approach (as attraction has some bearing on the formation of relationships). However, answers which focus solely on attraction without really relating this material to relationships should be considered with particular emphasis on the criteria of ‘construction’ (**AO1**) and ‘effectiveness’ (**AO2**) when determining marks.

Note that the question clearly specifies which aspect of relationships is appropriate (i.e. their *formation*). Therefore it is not acceptable for candidates to discuss theories that are concerned with the dissolution of relationships, or even theories that explain cultural variations in relationships, *unless* this is dealing explicitly with cultural differences in the formation of relationships. Theories and research studies relating to the *maintenance* of relationships are more difficult to exclude when marking, but it is up to the candidate to justify their inclusion. Candidates may, therefore, write about the *components* of different relationships or even the *context* of relationships. We should not assume, therefore, that all answers will dwell on the formation of romantic relationships. It is perfectly acceptable for candidates to write about ‘understand’ relationships as a response to this question *provided* they are addressing formation issues rather than a general essay on the type of relationship in question.

AO2

For the **AO2** component of this question, it is acceptable for candidates to evaluate in terms of the evidence for or against their chosen theories/research studies, the cultural or gender biases inherent in certain theories or in terms of alternative explanations and perspectives. Some candidates may choose to write about post-modern explanations of relationships and the nature of male and female discourses. This perfectly acceptable either as distinctive *theories* of relationships or as evaluation of other theories.

Note that the question does not carry a plurality requirement, the critical word being *research* rather than *research studies*.

Question 2: AO1

Description of research relating to the formation of relationships.

Band	Mark allocation	Marks
Band 3 Top	Description of research relating to the formation of relationships is substantial . It is accurate and well-detailed . The organisation and structure of the answer is coherent . There is substantial evidence of breadth and depth and an appropriate balance between them is achieved.	12-11
Band 3 Bottom	Description of research relating to the formation of relationships is slightly limited . It is accurate and reasonably detailed . The organisation and structure of the answer is coherent . There is evidence of breadth/depth and, whilst there is evidence of breadth and depth , a balance between them is not always achieved.	10-9
Band 2 Top	Description of research relating to the formation of relationships is limited . It is generally accurate and reasonably detailed . The organisation and structure of the answer is reasonably constructed . There is increasing evidence of breadth and/or depth.	8-7
Band 2 Bottom	Description of research relating to the formation of relationships is basic . It is generally accurate but lacks detail . The organisation and structure of the answer is reasonable . There is some evidence of breadth and/or depth.	6-5
Band 1 Top	Description of research relating to the formation of relationships is rudimentary and sometimes flawed . There is some focus on the question. The organisation and structure of the answer is reasonable .	4-3
Band 1 Bottom	Description of research relating to the formation of relationships is just discernible . It is weak and shows muddled understanding. The answer may be wholly or mainly irrelevant to the question's requirement.	2-0

Question 2: AO2

Evaluation of research relating to the formation of relationships.

Band	Mark allocation	Marks
Band 3 Top	Evaluation of research relating to the formation of relationships is thorough and there is evidence of appropriate selection and coherent elaboration . The material is used in a highly effective manner.	12-11
Band 3 Bottom	Evaluation of research relating to the formation of relationships is slightly limited and there is evidence of appropriate selection and elaboration . The material is used in an effective manner.	10-9
Band 2 Top	Evaluation of research relating to the formation of relationships is limited and there is reasonable elaboration . The material is used in a reasonably effective manner.	8-7
Band 2 Bottom	Evaluation of research relating to the formation of relationships is basic and there is some evidence of elaboration. The material is used in a restricted manner.	6-5
Band 1 Top	Evaluation of research relating to the formation of relationships is superficial and rudimentary and there is no evidence of elaboration. The material is used in a restricted manner.	4-3
Band 1 Bottom	Evaluation of research relating to the formation of relationships is muddled and incomplete . The material may be wholly or mainly irrelevant .	2-0

3

Total for this question: 24 marks

- (a) Outline *two* social psychological theories of aggression. (12 marks)
- (b) Evaluate the *two* theories of aggression that you outlined in part (a) in terms of relevant research studies. (12 marks)

Marking criteria

Outline is an **AO1** injunction, which requires candidates to provide a summary description of two social psychological theories of aggression [part (a) of the question]. The **AO2** injunction is *Evaluate*, which requires the candidates to present evidence of AO2 in relation to the two social psychological theories of aggression previously outlined in part (a) of the question.

(a) AO1

The use of the term ‘social psychological theories of aggression’ is intended to remain faithful to the wording of the specification, but also allows for theories that are more ‘psychological’ (e.g. frustration aggression theory, psychoanalytic theory) than ‘social psychological’. Examples of appropriate social psychological theories would include social learning theory, deindividuation and relative deprivation theory. Some candidates may even be adventurous enough to include an outline of the social constructionist perspective on aggression. This too would be appropriate as a response to this question. Theories that would not be acceptable in response to this question include theories that are based on *physiological* factors (e.g. the role of motivation, androgens such as testosterone, serotonin, brain injury). Some candidates may present outlines of more general *perspectives* (such as social constructionist) rather than specific *theories*. This is acceptable as a theory at a ‘macro’ level. Some candidates may spend a large proportion of their description of social learning theory describing Bandura’s Bobo doll studies. Only those elements that relate explicitly to the theory of social learning should receive credit. It is possible however, to export the remainder to part (b).

(b) AO2

Candidates should evaluate only the two theories that they outlined in the first part of the question. Candidates who simply *describe* appropriate research studies without using this material as part of a sustained critical commentary will receive a maximum of 4 marks (top of Band 1) for the **AO2** component. Better answers should *evaluate* their theories using the same research evidence. They would receive more marks because the material is being used more *effectively*.

Note that partial performance penalties apply in this question (see **AO1** and **AO2** mark allocations). Answers that demonstrate partial performance should receive a maximum mark of 8/12 for that component. It is not necessary (under plurality rules of the question) for candidates to include more than one research study for each theory being evaluated. Candidates whose answers are restricted to just one study per theory should not be further penalised under partial performance criteria.

If a candidate includes material that is *clearly relevant* and would earn marks in one part of a question, it should remain (when determining marks) *regardless* of whether it might earn more marks elsewhere. If the material is only *peripherally relevant* or *irrelevant* to one part of the question and would earn marks in the other part, then it should be ‘exported’ (when determining marks) to that part.

Question 3: AO1

Outline of two social psychological theories of aggression.

Band	Mark allocation	Marks
Band 3 Top	Outline of two social psychological theories of aggression is substantial . It is accurate and well-detailed . The organisation and structure of the answer is coherent .	12-11
Band 3 Bottom	Outline of two social psychological theories of aggression is slightly limited . It is accurate and reasonably detailed . The organisation and structure of the answer is coherent .	10-9
Band 2 Top	Outline of two social psychological theories of aggression is limited . It is generally accurate and reasonably detailed . The organisation and structure of the answer is reasonably constructed . <i>Partial performance is substantial, accurate and well-detailed (top of band) or slightly limited, accurate and reasonably detailed (bottom of band).</i>	8-7
Band 2 Bottom	Outline of two social psychological theories of aggression is basic . It is generally accurate but lacks detail . The organisation and structure of the answer is reasonable . <i>Partial performance is limited, generally accurate and reasonably detailed.</i>	6-5
Band 1 Top	Outline of two social psychological theories of aggression is rudimentary and sometimes flawed . There is some focus on the question. The organisation and structure of the answer is reasonable . <i>Partial performance is basic, generally accurate and lacking detail.</i>	4-3
Band 1 Bottom	Outline of two social psychological theories of aggression is just discernible . It is weak and shows muddled understanding. The answer may be wholly or mainly irrelevant to the question's requirement. <i>Partial performance is rudimentary and sometimes flawed with little focus on the question.</i>	2-0

Question 3: AO2

Evaluation of two social psychological theories of aggression in terms of relevant research studies.

Band	Mark allocation	Marks
Band 3 Top	Evaluation of two social psychological theories of aggression in terms of relevant research studies is thorough and there is evidence of appropriate selection and coherent elaboration . The material is used in a highly effective manner.	12-11
Band 3 Bottom	Evaluation of two social psychological theories of aggression in terms of relevant research studies is slightly limited and there is evidence of appropriate selection and elaboration . The material is used in an effective manner.	10-9
Band 2 Top	Evaluation of two social psychological theories of aggression in terms of relevant research studies is limited and there is reasonable elaboration . The material is used in a reasonably effective manner. <i>Partial performance is thorough, coherent and highly effective used of material (top of band) or slightly limited and effective use of material (bottom of band).</i>	8-7
Band 2 Bottom	Evaluation of two social psychological theories of aggression in terms of relevant research studies is basic and there is some evidence of elaboration. The material is used in a restricted manner. <i>Partial performance is limited with reasonable elaboration and reasonably effective use of material.</i>	6-5
Band 1 Top	Evaluation of two social psychological theories of aggression in terms of relevant research studies is superficial and rudimentary and there is no evidence of elaboration. The material is not used effectively . <i>Partial performance is basic with some evidence of elaboration; restricted use of material.</i>	4-3
Band 1 Bottom	Evaluation of two social psychological theories of aggression in terms of relevant research studies is muddled and incomplete . The material may be wholly or mainly irrelevant . <i>Partial performance is superficial with no evidence of elaboration; not used effectively.</i>	2-0

Section B: Physiological Psychology

4

Total for this question: 24 marks

Discuss the organisation of language in the brain.**(24 marks)****Marking criteria**

Discuss is an **AO1** and **AO2** term which requires the candidate to both describe and evaluate the organisation of language in the brain.

AO1

It is likely that most answers to this question will deal with issues of both *localisation* and *lateralisation*. Verbal behaviour is a lateralised function, with most language disturbances occurring after damage to the left side of the brain. Candidates may, make reference to the existence of specialised language areas in the brain (e.g. Broca's area and Wernicke's area). Candidates may also point out, for example, that the left hemisphere has become specialised in the analysis of sequences of behaviours (such as sentences) and in the production of sequences of voluntary movements (such as in speech).

Also appropriate in this context would be a discussion of speech disorders and the insights they give into the way that language is organised in the brain. Appropriate disorders include apraxia (the inability to execute a learned movement), aphasia (in various forms – surface or deep, Broca's, Wernicke's) and so on. Although unlikely, it is possible that some candidates may offer a discussion of Chomsky's views on language organisation (e.g. the language acquisition device). Such material may be credited *provided* it addresses how such organisation relates to brain structure.

As the word 'research' allows for both research *studies* and also explanations generated by such studies, some candidates may attempt to explain *why* language is organised in this way, and how it is these brain structures have evolved. This approach is perfectly acceptable and should receive credit.

AO2

Evaluation may be achieved in a number of ways, e.g. through examination of alternative explanations, supporting research evidence or other forms of relevant *commentary*. It is most likely that candidates may use research studies to evaluate assumptions about language organisation in the brain, or perhaps use the insights from brain injury as a way of confirming the claims made previously. It is also possible that candidates might consider how such organisation might have evolved in the first place. One such explanation sees lateralisation in the brain evolving because of the functional incompatibility of brain systems. It is possible that two functions (such as language and spatial processing) must be kept apart because optimal performance in one is somehow detrimental to optimal performance in the other. Cues that are important for language are irrelevant for spatial processing, and vice-versa. Such discussion would count as 'commentary' on the organisation of language, and therefore is acceptable as **AO2**. Note that discussion of other forms of brain organisation of hemisphere asymmetries (e.g. handedness) would not be relevant in the context of this question, unless the candidate is making an explicit link with the organisation of language in the brain.

Question 4: AO1*Description of the organisation of language in the brain.*

Band	Mark allocation	Marks
Band 3 Top	Description of the organisation of language in the brain is substantial . It is accurate and well-detailed . The organisation and structure of the answer is coherent . There is substantial evidence of breadth and depth and an appropriate balance between them is achieved.	12-11
Band 3 Bottom	Description of the organisation of language in the brain is slightly limited . It is accurate and reasonably detailed . The organisation and structure of the answer is coherent . There is evidence of breadth/depth and, whilst there is evidence of breadth and depth , a balance between them is not always achieved.	10-9
Band 2 Top	Description of the organisation of language in the brain is limited . It is generally accurate and reasonably detailed . The organisation and structure of the answer is reasonably constructed . There is increasing evidence of breadth and/or depth.	8-7
Band 2 Bottom	Description of the organisation of language in the brain is basic . It is generally accurate but lacks detail . The organisation and structure of the answer is reasonable . There is some evidence of breadth and/or depth.	6-5
Band 1 Top	Description of the organisation of language in the brain is rudimentary and sometimes flawed . There is some focus on the question. The organisation and structure of the answer is reasonable .	4-3
Band 1 Bottom	Description of the organisation of language in the brain is just discernible . It is weak and shows muddled understanding. The answer may be wholly or mainly irrelevant to the question's requirement.	2-0

Question 4: AO2*Evaluation of the organisation of language in the brain.*

Band	Mark allocation	Marks
Band 3 Top	Evaluation of the organisation of language in the brain is thorough and there is evidence of appropriate selection and coherent elaboration . The material is used in a highly effective manner.	12-11
Band 3 Bottom	Evaluation of the organisation of language in the brain is slightly limited and there is evidence of appropriate selection and elaboration . The material is used in an effective manner.	10-9
Band 2 Top	Evaluation of the organisation of language in the brain is limited and there is reasonable elaboration . The material is used in a reasonably effective manner.	8-7
Band 2 Bottom	Evaluation of the organisation of language in the brain is basic and there is some evidence of elaboration. The material is used in a restricted manner.	6-5
Band 1 Top	Evaluation of the organisation of language in the brain is superficial and rudimentary and there is no evidence of elaboration. The material is not used effectively .	4-3
Band 1 Bottom	Evaluation of the organisation of language in the brain is muddled and incomplete . The material may be wholly or mainly irrelevant .	2-0

Discuss the role of endogenous pacemakers and exogenous zeitgebers in biological rhythms. (24 marks)

Marking criteria

Discuss is an AO1 and AO2 term which requires the candidate to both describe and evaluate the role of endogenous pacemakers and exogenous zeitgebers in biological rhythms.

AO1

The terms ‘endogenous pacemaker’ and ‘exogenous zeitgeber’ are mentioned as specific requirements in the specification, therefore candidates should be reasonably well-prepared for their assessment. The question is sufficiently open-ended to give candidates the opportunity to discuss any aspect of the role of these two aspects of biological rhythms. There is no requirement for candidates to restrict their focus to humans (or even to discuss humans at all), therefore studies of non-humans are equally appropriate in response to this question. There is no need for candidates to discuss more than one type of biological rhythm, and it is most likely that candidates will restrict themselves to circadian rhythms.

Endogenous pacemakers include the *pineal gland* (in birds and reptiles) and the *suprachiasmatic nucleus* (in mammals). The main exogenous zeitgeber for humans are the dark/light cues, although for non-humans and for other types of biological rhythm, other external factors (e.g. the changing seasons) may serve the same purpose.

AO2

Evaluation may take the form of research support for endogenous pacemakers and exogenous zeitgebers. It is also possible that candidates draw on physiological evidence from studies of non-humans. For example, lesions of the suprachiasmatic nucleus in hamsters destroy the animals’ breeding cycles. It is also possible that some candidates may consider the insights from disruptions of bodily rhythms, for example from studies of jet lag or shift work. Any such inclusion must be explicitly linked with a discussion of the role of endogenous pacemakers and exogenous zeitgebers rather than simply being included as a topic in its own right. Insights from research into Seasonal Affective Disorder (SAD) and the importance of melatonin might be usefully employed in this context. Similarly, research on isolation (e.g. Michel Siffre’s free-running biological clock) can be used to support the existence of an endogenous pacemaker that is set by exogenous zeitgebers.

Note that partial performance penalties apply in this question (see AO1 and AO2 mark allocations). Answers that demonstrate partial performance should receive a maximum mark of 8/12 for that component.

It may be difficult to disentangle AO1 and AO2 material in this question if candidates base their answer predominantly around research studies. In such cases the description of such studies should count as AO1 and any commentary on these studies as AO2.

Question 5: AO1

Description of the role of endogenous pacemakers and exogenous zeitgebers in biological rhythms.

Band	Mark allocation	Marks
Band 3 Top	Description of the role of endogenous pacemakers and exogenous zeitgebers in biological rhythms is substantial . It is accurate and well-detailed . The organisation and structure of the answer is coherent . There is substantial evidence of breadth and depth and an appropriate balance between them is achieved.	12-11
Band 3 Bottom	Description of the role of endogenous pacemakers and exogenous zeitgebers in biological rhythms is slightly limited . It is accurate and reasonably detailed . The organisation and structure of the answer is coherent . There is evidence of breadth/depth and, whilst there is evidence of breadth and depth, a balance between them is not always achieved.	10-9
Band 2 Top	Description of the role of endogenous pacemakers and exogenous zeitgebers in biological rhythms is limited . It is generally accurate and reasonably detailed . The organisation and structure of the answer is reasonably constructed . There is increasing evidence of breadth and/or depth. <i>Partial performance is substantial, accurate and well-detailed (top of band) or slightly limited, accurate and reasonably detailed (bottom of band).</i>	8-7
Band 2 Bottom	Description of the role of endogenous pacemakers and exogenous zeitgebers in biological rhythms is basic . It is generally accurate but lacks detail . The organisation and structure of the answer is reasonable . There is some evidence of breadth and/or depth. <i>Partial performance is limited, generally accurate and reasonably detailed.</i>	6-5
Band 1 Top	Description of the role of endogenous pacemakers and exogenous zeitgebers in biological rhythms is rudimentary and sometimes flawed . There is some focus on the question. The organisation and structure of the answer is reasonable . <i>Partial performance is basic, generally accurate and lacking detail.</i>	4-3
Band 1 Bottom	Description of the role of endogenous pacemakers and exogenous zeitgebers in biological rhythms is just discernible . It is weak and shows muddled understanding. The answer may be wholly or mainly irrelevant to the question's requirement. <i>Partial performance is rudimentary and sometimes flawed with little focus on the question.</i>	2-0

Question 5: AO2

Evaluation of the role of endogenous pacemakers and exogenous zeitgebers in biological rhythms.

Band	Mark allocation	Marks
Band 3 Top	Evaluation of the role of endogenous pacemakers and exogenous zeitgebers in biological rhythms is thorough and there is evidence of appropriate selection and coherent elaboration . The material is used in a highly effective manner.	12-11
Band 3 Bottom	Evaluation of the role of endogenous pacemakers and exogenous zeitgebers in biological rhythms is slightly limited and there is evidence of appropriate selection and elaboration . The material is used in an effective manner.	10-9
Band 2 Top	Evaluation of the role of endogenous pacemakers and exogenous zeitgebers in biological rhythms is limited and there is reasonable elaboration . The material is used in a reasonably effective manner. <i>Partial performance is thorough, coherent and highly effective use of material (top of band) or slightly limited and effective use of material (bottom of band).</i>	8-7
Band 2 Bottom	Evaluation of the role of endogenous pacemakers and exogenous zeitgebers in biological rhythms is basic and there is some evidence of elaboration. The material is used in a restricted manner. <i>Partial performance is limited with reasonable elaboration, and reasonably effective use of material.</i>	6-5
Band 1 Top	Evaluation of the role of endogenous pacemakers and exogenous zeitgebers in biological rhythms is superficial and rudimentary and there is no evidence of elaboration. The material is not used effectively . <i>Partial performance is basic with some evidence of elaboration; restricted use of material.</i>	4-3
Band 1 Bottom	Evaluation of the role of endogenous pacemakers and exogenous zeitgebers in biological rhythms is muddled and incomplete . The material may be wholly or mainly irrelevant . <i>Partial performance is superficial with no evidence of elaboration; not used effectively.</i>	2-0

- (a) Outline and evaluate *one* physiological approach (e.g. homeostatic drive theory) to explaining motivation. (12 marks)
- (b) Outline and evaluate *one* psychological approach (e.g. expectancy theory) to explaining motivation. (12 marks)

Marking criteria

- (a) *Outline* is an **AO1** injunction, which requires candidates to provide a summary description of one physiological (e.g. homeostatic drive theory) approach to explaining motivation. *Evaluate* is an **AO2** injunction which requires the candidate to present evidence of AO2 in relation to this theory.
- (b) *Outline* is an **AO1** injunction, which requires candidates to provide a summary description of one psychological (e.g. expectancy theory) approach to explaining motivation. *Evaluate* is an **AO2** injunction which requires the candidate to present evidence of AO2 in relation to this theory.

(a) AO1

The main requirement of this part of the question is that the chosen theory is *physiological* in nature. The most likely theories that would fulfil this criterion are the homeostatic theories. It is acceptable for candidates to treat the homeostatic perspective (e.g. on hunger and thirst) as one *theory* in the context of this question. It would also be acceptable to consider physiological mechanisms responsible for the regulation of homeostatic needs.

AO2

Evaluation might take the form of empirical support for the assumptions of the given theory, or even demonstrating the physiological correlates of a theorised mechanism. Physiological explanations of motivation might also be seen to ignore the cognitive aspects or specific aims of human behaviour. It is possible that some candidates may attempt to evaluate this theory by introducing another *non-physiological* theory. This is acceptable provided that there has been an attempt to use this material explicitly as an evaluation of the physiological theory rather than simply presenting an alternative perspective on motivation. Evaluation might also focus on the *application* of these explanations, i.e. their ability to explain everyday motivation.

(b) AO1

The main requirement of this second part of the question is that the chosen theory is *psychological* in nature. The most likely theories that would fulfil this criterion are Maslow's hierarchy of needs (Maslow, 1954), Murray's theory of needs (Murray, 1938) and the example given in the question, expectancy theory.

AO2

As with part (a), evaluation is largely dependent on the theory chosen, but is most likely to involve an assessment of the degree of research support for the chosen theory or its explanatory power. The same comments regarding the use of alternative perspectives on motivation apply (see above).

If a candidate includes material that is *clearly relevant* and would earn marks in one part of a question, it should remain (when determining marks) *regardless* of whether it might earn more marks elsewhere. If the material is only *peripherally relevant* or *irrelevant* to one part of the question and would earn marks in the other part, then it should be '*exported*' (when determining marks) to that part.

Question 6: AO1 (used for both parts of the question)

Outline of one physiological/psychological approach to explaining motivation.

Band	Mark allocation	Marks
Band 3 Top	Outline of one physiological/psychological approach to explaining motivation is substantial . It is accurate and well-detailed . The organisation and structure of the answer is coherent .	6
Band 3 Bottom	Outline of one physiological/psychological approach to explaining motivation is slightly limited . It is accurate and reasonably detailed . The organisation and structure of the answer is coherent .	5
Band 2 Top	Outline of one physiological/psychological approach to explaining motivation is limited . It is generally accurate and reasonably detailed . The organisation and structure of the answer is reasonably constructed .	4
Band 2 Bottom	Outline of one physiological/psychological approach to explaining motivation is basic . It is generally accurate but lacks detail . The organisation and structure of the answer is reasonable .	3
Band 1 Top	Outline of one physiological/psychological approach to explaining motivation is rudimentary and sometimes flawed . There is some focus on the question. The organisation and structure of the answer is reasonable .	2
Band 1 Bottom	Outline of one physiological/psychological approach to explaining motivation is just discernible . It is weak and shows muddled understanding . The answer may be wholly or mainly irrelevant to the question's requirement.	1-0

Question 6: AO2 (used for both parts of the question)

Outline of one physiological/psychological approach to explaining motivation.

Band	Mark allocation	Marks
Band 3 Top	Evaluation of one physiological/psychological approach to explaining motivation is thorough and there is evidence of appropriate selection and coherent elaboration . The material is used in a highly effective manner.	6
Band 3 Bottom	Evaluation of one physiological/psychological approach to explaining motivation is slightly limited and there is evidence of appropriate selection and elaboration . The material is used in an effective manner.	5
Band 2 Top	Evaluation of one physiological/psychological approach to explaining motivation is limited and there is reasonable elaboration . The material is used in a reasonably effective manner.	4
Band 2 Bottom	Evaluation of one physiological/psychological approach to explaining motivation is basic and there is some evidence of elaboration. The material is used in a restricted manner.	3
Band 1 Top	Evaluation of one physiological/psychological approach to explaining motivation is superficial and rudimentary and there is no evidence of elaboration . The material is not used effectively .	2
Band 1 Bottom	Evaluation of one physiological/psychological approach to explaining motivation is muddled and incomplete . The material may be wholly or mainly irrelevant .	1-0

Section C: Cognitive Psychology

7

Total for this question: 24 marks

Outline and assess *two* explanations of focused attention (e.g. Broadbent, Treisman, Deutsch and Deutsch). (24 marks)

Marking criteria

Outline is an **AO1** injunction, which requires candidates to provide a summary description of two explanations of focused attention. *Assess* is an **AO2** injunction which requires the candidate to present evidence of AO2 for these two explanations of focused attention.

AO1

The question mentions three explanations of focused (selective) attention (Broadbent, Treisman, and Deutsch and Deutsch). Although these are only included as *examples*, it is likely that most candidates may use two of these three theories as the basis of their response to this question. There are others such as Johnston and Heinz's theory and later developments of the previously mentioned theories. There is no explicit requirement for candidates to write about *theories* per se, as explanations derived from empirical work are also perfectly acceptable. Candidates who choose explanations of *divided* attention (e.g. Kahneman's capacity/resource allocation model) should not receive credit. These explanations should then be the ones credited in *both* parts of the question. Note that as the question only requires candidates to *outline* their chosen theories, the degree of descriptive detail expected should be consistent with the demands of this injunction.

AO2

Assessing the two chosen explanations is most likely to take the form of either reviewing research support for these explanations or perhaps their explanatory power. It is also possible that some candidates may use the strengths (or weaknesses) of one explanation as a way of assessing the explanatory power of another. However, some candidates may simply *describe* alternative perspectives on focused attention rather than using them explicitly as an assessment of the strengths or weaknesses of their chosen explanations. Better answers should engage with their chosen explanations in a more explicit way. They, may for example, point out that a weakness of one theory (e.g. the relative inflexibility of Broadbent's single channel processor) is a strength of the alternative theory (e.g. Johnston and Heinz's more flexible approach to attention). They would receive more marks because the evaluative material is being used more *effectively*. Candidates who simply *describe* alternative perspectives without making any explicit attempt to use these in explicit evaluation of their chosen explanations should receive a maximum of 4 marks (top of Band 1) for the **AO2** component.

Note that partial performance penalties apply in this question (see **AO1** and **AO2** mark allocations). Answers that demonstrate partial performance should receive a maximum mark of 8/12 for that component (i.e. **AO1** and **AO2**).

Question 7: AO1

Outline of two explanations of focused attention.

Band	Mark allocation	Marks
Band 3 Top	Outline of two explanations of focused attention is substantial . It is accurate and well-detailed . The organisation and structure of the answer is coherent .	12-11
Band 3 Bottom	Outline of two explanations of focused attention is slightly limited . It is accurate and reasonably detailed . The organisation and structure of the answer is coherent .	10-9
Band 2 Top	Outline of two explanations of focused attention is limited . It is generally accurate and reasonably detailed . The organisation and structure of the answer is reasonably constructed . <i>Partial performance is substantial, accurate and well-detailed (top of band) or slightly limited, accurate and reasonably detailed (bottom of band).</i>	8-7
Band 2 Bottom	Outline of two explanations of focused attention is basic . It is generally accurate but lacks detail . The organisation and structure of the answer is reasonable . <i>Partial performance is limited, generally accurate and reasonably detailed.</i>	6-5
Band 1 Top	Outline of two explanations of focused attention is rudimentary and sometimes flawed . There is some focus on the question. The organisation and structure of the answer is reasonable . <i>Partial performance is basic, generally accurate and lacking detail.</i>	4-3
Band 1 Bottom	Outline of two explanations of focused attention is just discernible . It is weak and shows muddled understanding. The answer may be wholly or mainly irrelevant to the question's requirement. <i>Partial performance is rudimentary and sometimes flawed with little focus on the question.</i>	2-0

Question 7: AO2

Assessment of two explanations of focused attention.

Band	Mark allocation	Marks
Band 3 Top	Assessment of two explanations of focused attention is thorough and there is evidence of appropriate selection and coherent elaboration . The material is used in a highly effective manner.	12-11
Band 3 Bottom	Assessment of two explanations of focused attention is slightly limited and there is evidence of appropriate selection and elaboration . The material is used in an effective manner.	10-9
Band 2 Top	Assessment of two explanations of focused attention is limited and there is reasonable elaboration . The material is used in a reasonably effective manner. <i>Partial performance is thorough, coherent and highly effective use of material (top of band) or slightly limited and effective use of material (bottom of band).</i>	8-7
Band 2 Bottom	Assessment of two explanations of focused attention is basic and there is some evidence of elaboration . The material is used in a restricted manner. <i>Partial performance is limited with reasonable elaboration, and reasonably effective use of material.</i>	6-5
Band 1 Top	Assessment of two explanations of focused attention is superficial and rudimentary and there is no evidence of elaboration . The material is not used effectively . <i>Partial performance is basic with some evidence of elaboration; restricted use of material.</i>	4-3
Band 1 Bottom	Assessment of two explanations of focused attention is muddled and incomplete . The material may be wholly or mainly irrelevant . <i>Partial performance is superficial with no evidence of elaboration; not used effectively.</i>	2-0

- | | |
|--|------------|
| (a) Describe <i>one</i> direct theory of visual perception (e.g. Gibson). | (12 marks) |
| (b) Evaluate the direct theory of perception that you described in part (a). | (12 marks) |

Marking criteria

Critically consider is an **AO1** and **AO2** term which requires the candidate to both describe and evaluate one direct theory of perception.

AO1

Although Gibson's theory is used only as an example in the question, it is undoubtedly the one most likely to be chosen by candidates. Therefore, appropriate content might include the importance of the optic array, the provision of invariant information such as texture gradient and flow patterns, affordance, and the importance of movement in perception. It is likely that many candidates may elaborate through the use of appropriate examples. These can be credited as elaboration of their description of the theory, but should not be used exclusively in lieu of informed psychological description of the theory itself.

It is possible that some candidates might choose an alternative to Gibson's theory. Some may choose to represent Marr's explanation of perception as a theory of 'direct' perception (Marr, 1982) or Greeno's 'situation theory' (Greeno, 1994). This is acceptable if unlikely as a response to this question. Candidates who write about Gregory's constructivist theory of perception should not receive marks in this first part of the question.

If candidates outline more than one theory of direct perception, the best one should be credited, unless they are linked under some kind of 'umbrella' approach, such as Gestalt.

AO2

Evaluation is most likely to take the form of either reviewing research support for the chosen theory or perhaps its explanatory power. A particular difficulty for Gibson's theory is in the explanation of visual illusions – phenomena that are perhaps a strength of the alternative constructivist theories such as Gregory's theory of perception.

It is possible that some candidates may *describe* alternative perspectives on perception (e.g. Gregory's theory) rather than using them explicitly as evaluation of their chosen direct theory. Better candidates may *evaluate* their chosen theory in a more explicit way. They may, for example, point out that a weakness of one theory (e.g. Gibson's failure to provide a convincing explanation for visual illusions) is a strength of the alternative theory. They would receive more marks because the evaluative material is being used more *effectively*. Candidates who simply *describe* alternative theories without making any explicit attempt to use these in explicit evaluation of their chosen theory should receive a maximum of 4 marks (top of Band 1) for the **AO2** component.

Question 8: AO1*Part (a) Description of one direct theory of perception.*

Band	Mark allocation	Marks
Band 3 Top	Description of one direct theory of perception is substantial . It is accurate and well-detailed . The organisation and structure of the answer is coherent . There is substantial evidence of breadth and depth and an appropriate balance between them is achieved.	12-11
Band 3 Bottom	Description of one direct theory of perception is slightly limited . It is accurate and reasonably detailed . The organisation and structure of the answer is coherent . There is evidence of breadth/depth and, whilst there is evidence of breadth/depth, a balance between them is not always achieved.	10-9
Band 2 Top	Description of one direct theory of perception is limited . It is generally accurate and reasonably detailed . The organisation and structure of the answer is reasonably constructed . There is increasing evidence of breadth and/or depth.	8-7
Band 2 Bottom	Description of one direct theory of perception is basic . It is generally accurate but lacks detail . The organisation and structure of the answer is reasonable . There is some evidence of breadth and/or depth.	6-5
Band 1 Top	Description of one direct theory of perception is rudimentary and sometimes flawed . There is some focus on the questions. The organisation and structure of the answer is reasonable .	4-3
Band 1 Bottom	Description of one direct theory of perception is just discernible . It is weak and shows muddled understanding. The answer may be wholly or mainly irrelevant to the question's requirement.	2-0

Question 8: AO2*Part (b) Evaluation of the direct theory of perception described in part (a).*

Band	Mark allocation	Marks
Band 3 Top	Evaluation of one direct theory of perception is thorough and there is evidence of appropriate selection and coherent elaboration . The material is used in a highly effective manner.	12-11
Band 3 Bottom	Evaluation of one direct theory of perception is slightly limited and there is evidence of appropriate selection and elaboration . The material is used in an effective manner.	10-9
Band 2 Top	Evaluation of one direct theory of perception is limited and there is reasonable elaboration . The material is used in a reasonably effective manner.	8-7
Band 2 Bottom	Evaluation of one direct theory of perception is basic and there is some evidence of elaboration. The material is used in a restricted manner.	6-5
Band 1 Top	Evaluation of one direct theory of perception is superficial and rudimentary and there is no evidence of elaboration. The material is not used effectively .	4-3
Band 1 Bottom	Evaluation of one direct theory of perception is muddled and incomplete . The material may be wholly or mainly irrelevant .	2-0

Describe and evaluate research (theories *and/or* studies) into the social and/or cultural aspects of language use. (24 marks)

Marking criteria

Describe is an **AO1** term which requires the candidate to give evidence of **AO1** with relation to research into the social and/or cultural aspects of language use. *Evaluate* is an **AO2** term which requires the candidate to give evidence of **AO2** with relation to this research. Note that, in the *Terms used in Examination Questions* document, the term, ‘research’ is defined as ‘the process of gaining knowledge and understanding via either theory construction, examination, or empirical data collection’.

AO1

It is most likely that candidates choose research *studies* carried out by Bernstein or Labov, although other studies and/or theories (e.g. on gender differences in language usage) would also be appropriate. It is possible that some candidates may include material based on the ‘linguistic relatively hypothesis’ (Whorf, 1956). This *may* be credited as appropriate provided the candidate has stressed the important role of social/cultural determinants of the relationship between language and thought. It is also possible that some candidates may focus on the social use of language from a Vygotskyian perspective – this is also acceptable in the context of this question. As the question does not stress language use *in humans*, it is permissible for candidates to consider investigations that have focused on the social/cultural use of ‘language’ in non-humans. Although such an approach would be unlikely, it would be acceptable *provided* the candidate made a sound case for the behaviour being *language*, and the context social/cultural.

Note that the use of the term ‘research’ in the question does not require a plurality response (i.e. more than one study or theory) although answers that are restricted to just one study or theory may well offer a more limited response to the question.

AO2

Evaluation may be accomplished in many ways, including criticisms of the chosen studies (e.g. Labov’s criticisms of Bernstein’s work), the degree to which these studies are supported by other research studies, or comments on the conclusions that might be drawn. If candidates take the ‘theory’ route in their answer, they may focus on the explanatory power of the chosen theories, their research support, or inconsistencies within the theories themselves. It is possible that candidates may introduce further theories or studies as a way of demonstrating alternative perspectives on this topic. The degree to which candidates *use* this material as part of a developed critical argument, rather than simply presenting alternative perspective, should constitute the *effectiveness* of the evaluation, and hence the number of marks awarded for this component. Candidates who simply *describe* alternative theories or appropriate research evidence without using this material as part of a sustained critical commentary should receive a maximum of 4 marks (top of Band 1) for this component.

Question 9: AO1

Description of research into the social and/or cultural aspects of language use.

Band	Mark allocation	Marks
Band 3 Top	Description of research into the social and/or cultural aspects of language use is substantial . It is accurate and well-detailed . The organisation and structure of the answer is coherent . There is substantial evidence of breadth and depth and an appropriate balance between them is achieved.	12-11
Band 3 Bottom	Description of research into the social and/or cultural aspects of language use is slightly limited . It is accurate and reasonably detailed . The organisation and structure of the answer is coherent . There is evidence of breadth/depth and whilst there is evidence of breadth and depth, a balance between them is not always achieved.	10-9
Band 2 Top	Description of research into the social and/or cultural aspects of language use is limited . It is generally accurate and reasonably detailed . The organisation and structure of the answer is reasonably constructed . There is increasing evidence of breadth and/or depth.	8-7
Band 2 Bottom	Description of research into the social and/or cultural aspects of language use is basic . It is generally accurate but lacks detail . The organisation and structure of the answer is reasonable . There is some evidence of breadth and/or depth.	6-5
Band 1 Top	Description of research into the social and/or cultural aspects of language use is rudimentary and sometimes flawed . There is some focus on the question. The organisation and structure of the answer is reasonable .	4-3
Band 1 Bottom	Description of research into the social and/or cultural aspects of language use is just discernible . It is weak and shows muddled understanding. The answer may be wholly or mainly irrelevant to the question's requirement.	2-0

Question 9: AO2

Evaluation of research into the social and/or cultural aspects of language use.

Band	Mark allocation	Marks
Band 3 Top	Evaluation of research into the social and/or cultural aspects of language use is thorough and there is evidence of appropriate selection and coherent elaboration . The material is used in a highly effective manner.	12-11
Band 3 Bottom	Evaluation of research into the social and/or cultural aspects of language use is slightly limited and there is evidence of appropriate selection and elaboration . The material is used in an effective manner.	10-9
Band 2 Top	Evaluation of research into the social and/or cultural aspects of language use is limited and there is reasonable elaboration . The material is used in a reasonably effective manner.	8-7
Band 2 Bottom	Evaluation of research into the social and/or cultural aspects of language use is basic and there is some evidence of elaboration. The material is used in a restricted manner.	6-5
Band 1 Top	Evaluation of research into the social and/or cultural aspects of language use is superficial and rudimentary and there is no evidence of elaboration. The material is not used effectively .	4-3
Band 1 Bottom	Evaluation of research into the social and/or cultural aspects of language use is muddled and incomplete . The material may be wholly or mainly irrelevant .	2-0

Section D: Developmental Psychology

10

Total for this question: 24 marks

Critically consider research (theories *and/or* studies) into the role of cultural factors in the development of intelligence test performance. (24 marks)

Marking criteria

Critically consider is an **AO1** and **AO2** term, which requires the candidate to both describe and evaluate research into the role of cultural factors in the development of intelligence test performance. Note that, in the *Terms used in Examinations* document, the term ‘research’ is defined as ‘the process of gaining knowledge and understanding via either theory construction, examination, or empirical data collection.

AO1

As the wording in this question (and in the specification) refers to the ‘development of test intelligence performance’, it is acceptable for candidates to focus on environmental factors (such as home background, diet etc) in the development of intelligence itself, and/or factors affecting test performance (e.g. cultural bias in intelligence tests). Appropriate content would include research relating to home background (e.g. the Rochester longitudinal study, Sameroff et al, 1993), parental involvement (e.g Hart and Risley, 1995) and the various studies of compensatory education (such as Headstart). Other relevant insights might include the success (or otherwise) or ‘hothousing’ and of attempts to boost intelligence through the administration of vitamins. Conversely, candidate may focus on the effects of deprivation (social, parental, diet etc) as an attempt to show the detrimental effects that such experiences have on the child’s intellectual development. Alternatively, candidates may write about research that has concentrated on intelligence *test* performance, most notably studies that have compared the nature of intelligence in different cultures, or perhaps the race IQ debate.

AO2

Evaluation may be achieved through an examination of the conclusions that have been drawn from chosen studies or the degree to which they are, in turn, supported or challenged by other research studies. Candidates may consider attempts to *apply* the findings of research in compensatory or enrichment programmes or in the development of culture-fair tests.

Note that because of the definition of the term ‘research’ (AQA *Terms used in Examinations*), it is acceptable for candidates to refer to *alternative* explanations of intelligence test performance (e.g. genetic influences) as part of their *critical* consideration of the role of cultural factors. Some candidates may simply *describe* these alternative explanations rather than using them explicitly as evaluation. Better answers may *evaluate* the role of cultural factors using the same alternative explanations as part of a sustained critical argument that is explicitly appropriate to the role of cultural factors. They would receive more marks because the material is being used more *effectively*. Candidates who simply *describe* alternative explanations should receive a maximum of 4 marks (top of Band 1) for the **AO2** component.

Question 10 (a): AO1

Description of research into the role of cultural factors in the development of intelligence test performance.

Band	Mark allocation	Marks
Band 3 Top	Description of research into the role of cultural factors in the development of intelligence test performance is substantial . It is accurate and well-detailed . The organisation and structure of the answer is coherent . There is substantial evidence of breadth and depth and an appropriate balance between them is achieved.	12-11
Band 3 Bottom	Description of research into the role of cultural factors in the development of intelligence test performance is slightly limited . It is accurate and reasonably detailed . The organisation and structure of the answer is coherent . There is evidence of breadth/depth and, whilst there is evidence of breadth and depth, a balance between them is not always achieved.	10-9
Band 2 Top	Description of research into the role of cultural factors in the development of intelligence test performance is limited . It is generally accurate and reasonably detailed . The organisation and structure of the answer is reasonably constructed . There is increasing evidence of breadth and/or depth.	8-7
Band 2 Bottom	Description of research into the role of cultural factors in the development of intelligence test performance is basic . It is generally accurate but lacks detail . The organisation and structure of the answer is reasonable . There is some evidence of breadth and/pr depth.	6-5
Band 1 Top	Description of research into the role of cultural factors in the development of intelligence test performance is rudimentary and sometimes flawed . There is some focus on the question. The organisation and structure of the answer is reasonable .	4-3
Band 1 Bottom	Description of research into the role of cultural factors in the development of intelligence test performance is just discernible . It is weak and shows muddled understanding. The answer may be wholly or mainly irrelevant to the question's requirement.	2-0

Question 10 (b): AO2

Evaluation of research into the role of cultural factors in the development of intelligence test performance.

Band	Mark allocation	Marks
Band 3 Top	Evaluation of research into the role of cultural factors in the development of intelligence test performance is thorough and there is evidence of appropriate selection and coherent elaboration . The material is used in a highly effective manner.	12-11
Band 3 Bottom	Evaluation of research into the role of cultural factors in the development of intelligence test performance is slightly limited and there is evidence of appropriate selection and elaboration . The material is used in an effective manner.	10-9
Band 2 Top	Evaluation of research into the role of cultural factors in the development of intelligence test performance is limited and there is reasonable elaboration . The material is used in a reasonably effective manner.	8-7
Band 2 Bottom	Evaluation of research into the role of cultural factors in the development of intelligence test performance is basic and there is some evidence of elaboration. The material is used in a restricted manner.	6-5
Band 1 Top	Evaluation of research into the role of cultural factors in the development of intelligence test performance is superficial and rudimentary and there is no evidence of elaboration. The material is not used effectively .	4-3
Band 1 Bottom	Evaluation of research into the role of cultural factors in the development of intelligence test performance is muddled and incomplete . The material may be wholly or mainly irrelevant .	2-0

Describe and evaluate *one or more* explanations of personality development (e.g. Freud, Bandura, Mischel). (24 marks)

Marking criteria

Describe is an **AO1** term which requires the candidate to give evidence of **AO1** with relation to one or more explanations of personality development. The **AO2** injunction is *Evaluate*, which requires the candidate to present evidence of **AO2** in relation to the same explanation(s) of personality development.

AO1

Candidates must make sure that whatever material they choose in response to this question, it is explicitly relevant to the issue of ‘personality development’. This is not particularly problematic when covering Freudian theory (if chosen by the candidate), as arguably most, if not all of this theory is related to personality and its ongoing development. Candidates who choose Freudian theory cannot be expected to more than cover the main features of this theory (e.g. the structure of personality, stages of development, fixation etc) in the time available. The second theory given as an example in the question arises from the social learning approach to personality development. The basis of this approach lies in the work of Bandura and Walters (1963) who outlined the principles by which personality might be developed using the principles of their social learning theory. Their approach stressed the importance of ‘reciprocal determinism’ where the individual both influences and is influenced by his or her environment, and ‘self-efficacy’, where an individual’s sense of their personal effectiveness influences their achievement. The situationalist theory of Walter Mischel, (which stresses that an individual’s behaviour varies from situation to situation rather than being consistent across all situations) is also important in this context.

AO2

Evaluation may be both negative *and* positive, therefore it is possible that some candidates may stress the explanatory power of their chosen approaches to personality, as well as the research support for its/their assumptions. Alternatively, they may focus more on the inadequacies of an approach arguing, perhaps, that their chosen theory *supplements* other approaches to personality development rather than replacing them completely. It is possible that candidates may introduce further theories as a way of demonstrating alternatives to their chosen theory/theories. The degree to which candidates *use* this material as part of a developed critical argument, rather than simply presenting alternative perspective, should constitute the *effectiveness* of the evaluation, and hence the number of marks awarded for this component. Candidates who simply *describe* alternative theories or appropriate research evidence without using this material as part of a sustained critical commentary should receive a maximum of 4 marks (top of Band 1) for this component.

Question 11: AO1*Description of one or more explanations of personality development.*

Band	Mark allocation	Marks
Band 3 Top	Description of one or more explanations of personality development is substantial . It is accurate and well-detailed . The organisation and structure of the answer is coherent . There is substantial evidence of breadth and depth and an appropriate balance between them is achieved.	12-11
Band 3 Bottom	Description of one or more explanations of personality development is slightly limited . It is accurate and reasonably detailed . The organisation and structure of the answer is coherent . There is evidence of breadth/depth and, whilst there is evidence of breadth and depth, a balance between them is not always achieved.	10-9
Band 2 Top	Description of one or more explanations of personality development is limited . It is generally accurate and reasonably detailed . The organisation and structure of the answer is reasonably constructed . There is increasing evidence of breadth and/or depth.	8-7
Band 2 Bottom	Description of one or more explanations of personality development is basic . It is generally accurate but lacks detail . The organisation and structure of the answer is reasonable . There is some evidence of breadth and/or depth.	6-5
Band 1 Top	Description of one or more explanations of personality development is rudimentary and sometimes flawed . There is some focus on the question. The organisation and structure of the answer is reasonable .	4-3
Band 1 Bottom	Description of one or more explanations of personality development is just discernible . It is weak and shows muddled understanding. The answer may be wholly or mainly irrelevant to the question's requirement.	2-0

Question 11: AO2*Evaluation of one or more explanations of personality development.*

Band	Mark allocation	Marks
Band 3 Top	Evaluation of one or more explanations of personality development is thorough and there is evidence of appropriate selection and coherent elaboration . The material is used in a highly effective manner.	12-11
Band 3 Bottom	Evaluation of one or more explanations of personality development is slightly limited and there is evidence of appropriate selection and elaboration . The material is used in an effective manner.	10-9
Band 2 Top	Evaluation of one or more explanations of personality development is limited and there is reasonable elaboration . The material is used in a reasonably effective manner.	8-7
Band 2 Bottom	Evaluation of one or more explanations of personality development is basic and there is some evidence of elaboration. The material is used in a restricted manner.	6-5
Band 1 Top	Evaluation of one or more explanations of personality development is superficial and rudimentary and there is no evidence of elaboration. The material is not used effectively .	4-3
Band 1 Bottom	Evaluation of one or more explanations of personality development is muddled and incomplete . The material may be wholly or mainly irrelevant .	2-0

12

Total for this question: 24 marks

- (a) Outline *two* theories of development in early *and/or* middle adulthood. (12 marks)
- (b) To what extent does research (theories *and/or* studies) provide support for the view that there are crises in adult development? (12 marks)

Marking criteria

- (a) *Outline* is an **AO1** injunction, which requires candidates to provide a summary description of *two* theories of development in early and/or middle adulthood.
- (b) The **AO2** injunction is *To what extent*, which requires the candidate to present evidence of **AO2** in terms of a consideration of the extent to which research provides support for the view that there are crises in adult development.

(a) AO1

Candidates may choose to outline two of the ‘major’ theories of adulthood (e.g. Erikson’s ‘Eight Stages of Man’, Levinson’s ‘Seasons of a Man’s Life’ and Gould’s ‘Evolution of Adult Consciousness’). If this approach is taken, candidates should restrict their description to those stages that represent early and/or middle adulthood rather than adolescence or late adulthood. For example, description of Erikson’s theory might include the stages of intimacy versus isolation and generativity versus stagnation. Levinson’s theory may take in early adult transition, early adulthood, midlife transition and middle adulthood. Gould’s theory would include all stages from early twenties to the mid forties/fifties stage. Material relating to adolescence may only be credited if it refers to the transition from adolescence to early adulthood.

Note that neither this part of the question nor the part that follows asks for an evaluation of these theories, yet many candidates may be keen to offer some, and may feel ‘exposed’ if they fail to do so. Thus, we might expect evaluation to be included occasionally as part of the material in this part of the question. Much, if not all of this may be irrelevant to the specific requirements of the question. There is, however, a possibility that some may contribute to the **AO1** mark (if it adds an insight into the theory concerned) and that some may be *exported* to the second part of the question (**AO2**), provided it offers explicit discussion of the existence of crises in adult development.

(b) AO2

The existence of crises in development is a particular feature of Levinson’s theory, and it is implied in Erikson’s theory. All of these theories have something to say about the mid-life crisis, and this is what most candidates may address in their answer. It is possible that some candidates may include reference to the ‘storm and stress’ crisis of late adolescence. This is appropriate provided that candidates make the point that the *outcome* of this crisis is the emergence into adulthood.

The question asks specifically for research that tests the validity of these assumptions. Note that, in the *Terms used in Examinations* document, the term ‘research’ is defined as ‘the process of gaining knowledge and understanding via either theory construction, examination, or empirical data collection. Therefore this part of the question may deal (quite appropriately) with the issue of crises in development from an entirely theoretical perspective. The degree to which candidates *use* this material as part of a developed critical argument concerning the existence of crises in adult development, rather than simply presenting alternative research or explanations, should constitute the *effectiveness* of the evaluation, and hence the number of marks awarded for this component. Candidates who simply *describe* alternative theories or appropriate research evidence without using this material as part of a sustained critical commentary should receive a maximum of 4 marks (top of Band 1) for this component. It is possible that some candidates may make a case for life events (e.g. divorce) being examples of ‘crisis’ in development.

Note – there are partial performance penalties in Part (a) of this question, but not in Part (b).

Question 12: AO1

Outline of two theories of development in early and/or middle adulthood.

Band	Mark allocation	Marks
Band 3 Top	Outline of two theories of development in early and/or middle adulthood is substantial . It is accurate and well-detailed . The organisation and structure of the answer is coherent .	12-11
Band 3 Bottom	Outline of two theories of development in early and/or middle adulthood is slightly limited . It is accurate and reasonably detailed . The organisation and structure of the answer is coherent .	10-9
Band 2 Top	Outline of two theories of development in early and/or middle adulthood is limited . It is generally accurate and reasonably detailed . The organisation and structure of the answer is reasonably constructed . <i>Partial performance is substantial, accurate and well-detailed (top of band) or slightly limited, accurate and reasonably detailed (bottom of band).</i>	8-7
Band 2 Bottom	Outline of two theories of development in early and/or middle adulthood is basic . It is generally accurate but lacks detail . The organisation and structure of the answer is reasonable . <i>Partial performance is limited, generally accurate and reasonably detailed.</i>	6-5
Band 1 Top	Outline of two theories of development in early and/or middle adulthood is rudimentary and sometimes flawed . There is some focus on the question. The organisation and structure of the answer is reasonable . <i>Partial performance is basic, generally accurate and lacking detail.</i>	4-3
Band 1 Bottom	Outline of two theories of development in early and/or middle adulthood is just discernible . It is weak and shows muddled understanding. The answer may be wholly or mainly irrelevant to the question's requirement. <i>Partial performance is rudimentary and sometimes flawed with little or no focus on the question.</i>	2-0

Question 12: AO2

Research support for the view that there are crises in adult development.

Band	Mark allocation	Marks
Band 3 Top	Assessment of the extent of research support for crises in adult development is thorough and there is evidence of appropriate selection and coherent elaboration . The material is used in a highly effective manner.	12-11
Band 3 Bottom	Assessment of the extent of research support for crises in adult development is slightly limited and there is evidence of appropriate selection and elaboration . The material is used in an effective manner.	10-9
Band 2 Top	Assessment of the extent of research support for crises in adult development is limited and there is reasonable elaboration . The material is used in a reasonably effective manner.	8-7
Band 2 Bottom	Assessment of the extent of research support for crises in adult development is basic and there is some evidence of elaboration. The material is used in a restricted manner.	6-5
Band 1 Top	Assessment of the extent of research support for crises in adult development is superficial and rudimentary and there is no evidence of elaboration. The material is not used effectively .	4-3
Band 1 Bottom	Assessment of the extent of research support for crises in adult development is muddled or incomplete . The material may be wholly or mainly irrelevant .	2-0

Section E: Comparative Psychology

13

Total for this question: 24 marks

(a) Outline the nature of classical and operant conditioning.**(12 marks)****(b) Assess the role of either classical or operant conditioning in the behaviour of non-human animals.****(12 marks)****Marking criteria**

- (a) *Outline* is an **AO1** injunction, which requires candidates to provide a summary description of the nature of classical and operant conditioning.
- (b) The **AO2** injunction is *Assess*, which requires the candidate to present evidence of **AO2** in relation to the role of either classical or operant conditioning in animal behaviour.

AO1

The *nature* of classical conditioning can be taken here to mean the main features (i.e. assumptions and/or procedures) of classical conditioning. These include the predictive value of the CS, the gradual acquisition of the learned association between CS and UCS, the importance of order of presentation, the processes of extinction, spontaneous recovery and stimulus generalisation. For operant conditioning, candidates might include the nature of reinforcement and punishment, reinforcement schedules, the relationship between antecedents, behaviour and consequences (the ABC model), or make reference to Thorndike's Law of Effect.

There is a plurality requirement for this part of the question. Candidates who outline the nature of either operant or classical conditioning *alone*, should receive a maximum mark of Band 2 (top).

AO2

In assessing the role of classical conditioning in the behaviour of non-human animals, candidates may appraise the theory of classical conditioning itself (e.g. by explaining the biological constraints of classical conditioning or the problems posed by phenomena such as one-trial learning). Alternatively they may assess the degree to which the natural behaviour of animals shows evidence of classical conditioning in operation. For example, research has demonstrated the importance of this form of learning in foraging, hunting and behaviour towards conspecifics (most notably in reproductive behaviour). A similar approach may be taken if *operant* conditioning is chosen for the second part of this question with candidates focusing on the role of operant conditioning in, for example, mating behaviour or foraging behaviour. Note that this part of the question asks for an assessment of the role of *either* classical or operant conditioning. Candidates who include both should have the better one credited.

If a candidate includes material that is *clearly relevant* and would earn marks in one part of a question, it should remain (when determining marks) *regardless* of whether it might earn more marks elsewhere. If the material is only *peripherally relevant* or *irrelevant* to one part of the question and would earn marks in the other part, then it should be '*exported*' (when determining marks) to that part.

Question 13: AO1

Description of the nature of classical and operant conditioning.

Band	Mark allocation	Marks
Band 3 Top	Description of the nature of classical and operant conditioning is substantial . It is accurate and well-detailed . The organisation and structure of the answer is coherent . There is substantial evidence of breadth and depth and an appropriate balance between them is achieved.	12-11
Band 3 Bottom	Description of the nature of classical and operant conditioning is slightly limited. It is accurate and reasonably detailed . The organisation and structure of the answer is coherent . There is evidence of breadth/depth and whilst there is evidence of breadth and depth a balance between them is not always achieved.	10-9
Band 2 Top	Description of the nature of classical and operant conditioning is limited . It is generally accurate and reasonably detailed . The organisation and structure of the answer is reasonably constructed . There is increasing evidence of breadth and/or depth. <i>Partial performance is substantial, accurate and well-detailed (top of band) or slightly limited, accurate and reasonably detailed (bottom of band).</i>	8-7
Band 2 Bottom	Description of the nature of classical and operant conditioning is basic . It is generally accurate but lacks detail . The organisation and structure of the answer is reasonable . There is some evidence of breadth and/or depth. <i>Partial performance is limited, generally accurate and reasonably detailed.</i>	6-5
Band 1 Top	Description of the nature of classical and operant conditioning is rudimentary and sometimes flawed . There is some focus on the question. The organisation and structure of the answer is reasonable . <i>Partial performance is basic, generally accurate and lacking detail.</i>	4-3
Band 1 Bottom	Description of the nature of classical and operant conditioning is just discernible . It is weak and shows muddled understanding. The answer may be wholly or mainly irrelevant to the question's requirement. <i>Partial performance is rudimentary and sometimes flawed with little focus on the question.</i>	2-0

Question 13: AO2

Assessment of the role of classical or operant conditioning in the behaviour of non-human animals.

Band	Mark allocation	Marks
Band 3 Top	Assessment of the role of classical or operant conditioning in the behaviour of non-human animals is thorough and there is evidence of appropriate selection and coherent elaboration . The material is used in a highly effective manner.	12-11
Band 3 Bottom	Assessment of the role of classical or operant conditioning in the behaviour of non-human animals is slightly limited and there is evidence of appropriate selection and elaboration . The material is used in an effective manner.	10-9
Band 2 Top	Assessment of the role of classical or operant conditioning in the behaviour of non-human animals is limited and there is reasonable elaboration . The material is used in a reasonably effective manner.	8-7
Band 2 Bottom	Assessment of the role of classical or operant conditioning in the behaviour of non-human animals is basic and there is some evidence of elaboration. The material is used in a restricted manner.	6-5
Band 1 Top	Assessment of the role of classical or operant conditioning in the behaviour of non-human animals is superficial and rudimentary and there is no evidence of elaboration . The material is not used effectively .	4-3
Band 1 Bottom	Assessment of the role of classical or operant conditioning in the behaviour of non-human animals is muddled and incomplete . The material may be wholly or mainly irrelevant .	2-0

Outline and evaluate <i>two</i> explanations of animal navigation.	(24 marks)
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Marking criteria

Outline is an **AO1** term, which requires the candidates to provide a summary description of two explanations of animal navigation. *Evaluate* is an **AO2** term which requires the candidate to give evidence of **AO2** with relation to these explanations.

AO1

There are a number of different explanations of navigation that might be proposed for the **AO1** part of this question. For example, there is the suggestion that animals are able to make use of landmarks to guide them back to their home site. Other explanations have developed out of extensive research with pigeons, and include compass orientation and the sun arc hypothesis, the detection of magnetic fields and the possibility that pigeons make use of olfactory cues to navigate back to their home site. Some candidates may write about migratory behaviour. This is also acceptable under the general heading of ‘navigation’. An alternative approach to this question is to consider explanations that have been offered for the navigational behaviour of two (or more) different species. Thus it is perfectly legitimate for candidates to describe explanations of homing behaviour in (for example) salmon and pigeons. In such answers the ‘two explanations’ instruction in the question has been satisfied by the ‘two’ species in question, and it opens up the question in such a way that candidates may describe any number of different explanations for the navigational behaviour of each of the chosen species.

AO2

Candidates may choose to evaluate by examining the validity of explanations of animal navigation by considering studies that support or challenge their assumption. For example, the claims for cognitive mapping skills in insects have been largely dismissed by counter-evidence whereas evidence for the same skills in mammals is less conclusive. Evidence for the development of specific brain structures (e.g. the hippocampus) in animals who rely on their spatial memory has also provided support for the importance of memory in navigational behaviour. Also relevant as ‘critical commentary’ in this question is the observation that many animals use a hierarchy of navigational cues, rather than relying on just one. Candidates who simply *describe* such perspectives or appropriate research evidence without using this material as part of a sustained critical commentary on their explanations of animal navigation should receive a maximum of 4 marks (top of Band 1) for this comment.

The question asks for ‘two explanations of navigation’, therefore candidates who present only *one* explanation should receive a maximum mark in Band 2 (top) in both **AO1** and **AO2**. Some candidates may be aware of anthropological evidence relating to navigational behaviour in humans (or even studies of the navigational skills of London taxi drivers). As the question does not specifically exclude these, such material is potentially relevant and would receive credit.

Candidates who write about more than two explanations should have the best two credited.

Question 14: AO1

Outline of two explanations of animal navigation.

Band	Mark allocation	Marks
Band 3 Top	Outline of two explanations of animal navigation is substantial . It is accurate and well-detailed . The organisation and structure of the answer is coherent .	12-11
Band 3 Bottom	Outline of two explanations of animal navigation is slightly limited . It is accurate and reasonably detailed . The organisation and structure of the answer is coherent .	10-9
Band 2 Top	Outline of two explanations of animal navigation is limited . It is generally accurate and reasonably detailed . The organisation and structure of the answer is reasonably constructed . <i>Partial performance is substantial, accurate and well-detailed (top of band) or slightly limited, accurate and reasonably detailed (bottom of band).</i>	8-7
Band 2 Bottom	Outline of two explanations of animal navigation is basic . It is generally accurate but lacks detail . The organisation and structure of the answer is reasonable . <i>Partial performance is limited, generally accurate and reasonably detailed.</i>	6-5
Band 1 Top	Outline of two explanations of animal navigation is rudimentary and sometimes flawed . There is some focus on the question. The organisation and structure of the answer is reasonable . <i>Partial performance is basic, generally accurate and lacking detail.</i>	4-3
Band 1 Bottom	Outline of two explanations of animal navigation is just discernible . It is weak and shows muddled understanding. The answer may be wholly or mainly irrelevant to the question's requirement. <i>Partial performance is rudimentary and sometimes flawed with little focus on the question.</i>	2-0

Question 14: AO2

Evaluation of two explanations of animal navigation.

Band	Mark allocation	Marks
Band 3 Top	Evaluation of two explanations of animal navigation is thorough and there is evidence of appropriate selection and coherent elaboration . The material is used in a highly effective manner.	12-11
Band 3 Bottom	Evaluation of two explanations of animal navigation is slightly limited and there is evidence of appropriate selection and elaboration . The material is used in an effective manner.	10-9
Band 2 Top	Evaluation of two explanations of animal navigation is limited and there is reasonable elaboration. The material is used in a reasonably effective manner. <i>Partial performance is thorough, coherent and highly effective use of material (top of band) or slightly limited and effective use of material (bottom of band).</i>	8-7
Band 2 Bottom	Evaluation of two explanations of animal navigation is basic and there is some evidence of elaboration. The material is used in a restricted manner. <i>Partial performance is limited with reasonable elaboration and reasonably effective use of material.</i>	6-5
Band 1 Top	Evaluation of two explanations of animal navigation is superficial and rudimentary and there is no evidence of elaboration. The material is not used effectively . <i>Partial performance is basic with some evidence of elaboration; restricted use on material.</i>	4-3
Band 1 Bottom	Evaluation of two explanations of animal navigation is muddled and incomplete . The material may be wholly or mainly irrelevant . <i>Partial performance is superficial with no evidence of elaboration; not used effectively.</i>	2-0

15

Total for this question: 24 marks

Discuss the relationship between sexual selection and human reproductive behaviour.
(24 marks)

Marking criteria

Discuss is an AO1 and AO2 term which requires candidates to both describe and evaluate the relationship between sexual selection and human reproductive behaviour.

AO1

There is scope in this question for candidates to include a wide variety of different human behaviours that may (or may not) be influenced in some way by sexual selection. These include the development of human sexual characteristics, sexual dimorphism, mate choice and mate competition, sexual jealousy, cuckoldry, hidden ovulation, parental investment and different mating arrangements. It is even possible that some candidates may have read about the relationship between testis size and sexual behaviour. Provided they include human males in this formula, this material would be appropriate and would receive credit.

Each of these would be appropriate in the context of this question, and the exact content to be expected depends very much on the particular behaviours chosen. Although there is no explicit requirement to explain the processes of sexual selection, it is likely that many candidates may do just that. Although it is acceptable (up to a point) for candidates to draw on the study of non-human animals (e.g. the story of the peacocks tail), the question does ask for sexual selection and *human* reproductive behaviour. Therefore, overly extensive use of non-human examples or illustrations (i.e. beyond using non-humans to explain the basic principles of sexual selection) should not receive credit.

AO2

Evaluation may be accomplished in many ways, including criticisms of the chosen explanations, the degree to which these explanations are supported by research evidence or comments on the conclusions that might be drawn. It is possible that candidates may introduce alternative explanations (e.g. cultural or cognitive explanations) as a way of extending discussion of a particular area. The degree to which candidates *use* this material as part of a developed critical argument concerning the relationship between sexual selection and human reproductive behaviour, rather than simply presenting alternative research or explanations, should constitute the *effectiveness* of the evaluation, and hence the number of marks awarded for this component. Candidates who simply *describe* alternative theories or appropriate research evidence without using this material as part of a sustained critical commentary should receive a maximum of 4 marks (top of Band 1) for this component.

Question 15: AO1

Description of the relationship between sexual selection and human reproductive behaviour.

Band	Mark allocation	Marks
Band 3 Top	Description of the relationship between sexual selection and human reproductive behaviour is substantial . It is accurate and well-detailed . The organisation and structure of the answer is coherent . There is substantial evidence of breadth and depth and an appropriate balance between them is achieved.	12-11
Band 3 Bottom	Description of the relationship between sexual selection and human reproductive behaviour is slightly limited . It is accurate and reasonably detailed . The organisation and structure of the answer is coherent . There is evidence of breadth/depth and whilst there is evidence of breadth and depth, a balance between them is not always achieved.	10-9
Band 2 Top	Description of the relationship between sexual selection and human reproductive behaviour is limited . It is generally accurate and reasonably detailed . The organisation and structure of the answer is reasonably constructed . There is increasing evidence of breadth and/or depth.	8-7
Band 2 Bottom	Description of the relationship between sexual selection and human reproductive behaviour is basic . It is generally accurate but lacks detail . The organisation and structure of the answer is reasonable . There is some evidence of breadth and/or depth.	6-5
Band 1 Top	Description of the relationship between sexual selection and human reproductive behaviour is rudimentary and sometimes flawed . There is some focus on the question. The organisation and structure of the answer is reasonable .	4-3
Band 1 Bottom	Description of the relationship between sexual selection and human reproductive behaviour is just discernible . It is weak and shows muddled understanding. The answer may be wholly or mainly irrelevant to the question's requirement.	2-0

Question 15: AO2

Evaluation of the relationship between sexual selection and human reproductive behaviour

Band	Mark allocation	Marks
Band 3 Top	Evaluation of the relationship between sexual relationship behaviour is thorough and there is evidence of appropriate selection and coherent elaboration . The material is used in a highly effective manner.	12-11
Band 3 Bottom	Evaluation of the relationship between sexual relationship behaviour is slightly limited and there is evidence of appropriate selection and elaboration . The material is used in an effective manner.	10-9
Band 2 Top	Evaluation of the relationship between sexual relationship behaviour is limited and there is reasonable elaboration . The material is used in a reasonably effective manner.	8-7
Band 2 Bottom	Evaluation of the relationship between sexual relationship behaviour is basic and there is some evidence of elaboration. The material is used in a restricted manner.	6-5
Band 1 Top	Evaluation of the relationship between sexual relationship behaviour is superficial and rudimentary and there is no evidence of elaboration. The material is not used effectively .	4-3
Band 1 Bottom	Evaluation of the relationship between sexual relationship behaviour is muddled and incomplete . The material may be wholly or mainly irrelevant .	2-0

Assessment grid

Question	AO1	AO2	Total
1	12	12	24
2	12	12	24
3(a)	12		24
3(b)		12	
4	12	12	24
5	12	12	24
6(a)	6	6	24
6(b)	6	6	
7	12	12	24
8(a)	12		24
8(b)		12	
9	12	12	24
10	12	12	24
11	12	12	24
12(a)	12		24
12(b)		12	
13(a)	12		24
13(b)		12	
14	12	12	24
15	12	12	24
QoWC			4
Total for unit	36	36	76
A Level weighting (15%)	7.8%	7.2%	