

Evolutionary Explanations - Mark Scheme

Q1.

Marks for this question: AO1 = 6, AO3 = 10

Level	Marks	Description
4	13 – 16	Knowledge is accurate and generally well detailed. Discussion / evaluation / application is thorough and effective. The answer is clear, coherent and focused. Specialist terminology is used effectively. Minor detail and / or expansion of argument sometimes lacking.
3	9 – 12	Knowledge is evident. There are occasional inaccuracies. Discussion / evaluation / application is apparent and mostly effective. The answer is mostly clear and organised. Specialist terminology is mostly used effectively. Lacks focus in places.
2	5 – 8	Some knowledge is present. Focus is mainly on description. Any discussion / evaluation / application is only partly effective. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1 – 4	Knowledge is limited. Discussion / evaluation / application is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology either absent or inappropriately used.
	0	No relevant content.

Please note that although the content for this mark scheme remains the same, on most mark schemes for the new AQA Specification (Sept 2015 onwards) content appears as a bulleted list.

AO1

Candidates may outline the background to research on sexual selection and human reproductive behaviour in terms of evolutionary theory, selfish gene etc. Also relevant would be a description of the detailed processes involved in sexual selection, including intrasexual (mate competition) and intersexual (mate choice) selection. Other factors affecting mate choice, such as parental investment theory, and variations such as short and long-term mate preferences, would also be creditable.

Research with non-human animals may earn marks insofar as it is made explicitly relevant to human reproductive behaviour.

Research studies may be presented as illustrating the relationship between sexual selection and human reproductive behavior.

AO3

There are a variety of routes to credit. Research findings, such as Buss's cross-cultural studies and dating research, could be used effectively. Evaluation of research eg use of questionnaires and social desirability issues, may earn marks if the implications for the reliability and validity of findings are clear.

Credit comparison with alternative approaches eg social psychological explanations. Credit a more theoretical approach focusing for instance on broader issues eg free will and determinism – if sexual selection, human reproductive behaviour and the relationships it involves are driven by purely evolutionary considerations, then they would be highly predictable. In fact human reproductive behaviour has changed dramatically over the last century, with non-heterosexual relationships, widespread use of contraception, and couples choosing not to have children. This implies that we have more control (free will) over our behaviour than is implied by the evolutionary approach. Credit also relevant references to reductionism, cultural differences, gender biases and socially sensitive research.

Q2.

[AO1 = 6 AO3 = 10]

Level	Marks	Description
4	13 – 16	Knowledge of evolutionary explanations for partner preferences is accurate and generally well detailed. Discussion is thorough and effective. The answer is clear, coherent and focused. Specialist terminology is used effectively. Minor detail and / or expansion of argument sometimes lacking.
3	9 – 12	Knowledge of evolutionary explanations for partner preferences is evident. There are occasional inaccuracies. Discussion is apparent and mostly effective. The answer is mostly clear and organised. Specialist terminology is mostly used effectively. Lacks focus in places.
2	5 – 8	Some knowledge of evolutionary explanation(s) for partner preferences is present. Focus is mainly on description. Any discussion is only partly effective. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1 – 4	Knowledge of evolutionary explanation(s) for partner preferences is limited. Discussion is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology either absent or inappropriately used.
	0	No relevant content.

Possible content:

- natural selection theory: genes that confer reproductive advantage will

- increase in the gene pool
- intra-sexual selection – members of one sex (usually male) compete for access to the other sex (usually female) leading to male-female dimorphism – accentuation of secondary sexual characteristics in those with greater reproductive fitness
- inter-sexual selection – one sex (usually females) chooses from available prospective mates (usually males) according to attractiveness; biological marketplace explanation (Noe and Hammerstein 1995), genes that confer attractive qualities are more 'saleable'.

Possible evaluation points:

- apparent conflict between natural selection and sexual selection
- use of evidence to support or contradict theory, eg in favour of natural selection, eg studies of feature preferences in males and females, eg waist-hip ratio, facial symmetry
- animal evidence, eg mating strategies / parental investment and extrapolation to humans
- some explanations for female mate choice seem contrary to evolution – Fisher (1930) 'good-taste hypothesis'; Zahavi (1975) handicap / good-genes hypothesis
- sexual strategies theory – partner selection strategies differ according to what each partner wants from different type of relationship (long-term or short-term).

Credit other relevant evaluation points.

Only credit evaluation of the methodology used in studies when made relevant to discussion of the explanations.