

Q.5 Explain and evaluate the methodology used by the biological approach. **[12]**

Credit **could** be given for a discussion of the following:

- Use of laboratory experimentation/controlled observation.
- Use of non-human animals.
- Use of brain scanning techniques.
- Controlled, experimental nature of the approach.
- Reductionism.
- Issues of replicability.
- Issues of objectivity.
- Ethical issues surrounding non-human animal research.
- Issue of generalisability from animal to human learning.
- Any other relevant material.

Marks	AO3
10-12	Method(s) is/are clearly explained and have clear relevance to the approach. Evaluation is thorough and clearly structured, with coherent elaboration of relevant strength and weaknesses. Depth and range of discussion are displayed.
7-9	Method(s) is/are clearly stated and relevant. Evaluation is reasonably thorough and coherent, with both strengths and weaknesses given. Depth or range of discussion is displayed.
4-6	Appropriate method(s) is explained in a limited manner. Evaluation of method(s) is limited with evidence of strengths and/or weaknesses.
1-3	Statement of method(s) is explained in a limited manner. Evaluation of method(s) is limited with evidence of strengths and/or weaknesses. Evaluation of method(s) is superficial and very limited.
0	No relevant explanation or evaluation.

PSYCHOLOGY PY2

SECTION A

- Q.1** Summarise the aims **and** context of Buss's (1989) research '*Sex differences in human mate preferences*'. **[12]**

Credit **could** be given for the following:

Aims such as:

- Buss aimed to investigate if evolutionary explanations for sex differences in human mate preferences are found in cultures which vary in ecologies, locations, ethnic compositions, religious orientations and political inclinations.
- Other relevant details.

Context (evidence prior to research) such as:

- Description of evolutionary explanations for relationships.
- Description of relevant research such as Thornhill & Thornhill (1983), Trivers (1978) Alexander & Noonan (1979).
- Other relevant details.

Marks	AO1
10 - 12	Knowledge and understanding of aim(s) and context is accurate and well detailed. Depth and range are displayed, although not necessarily in equal measure. Language (including grammar, punctuation and spelling) is relevant, well structured, coherent and accurate.
7 - 9	Knowledge and understanding of aim(s) and context is reasonably accurate and less detailed. Depth or range is displayed. Language (including grammar, punctuation and spelling) is accurate, structured and clear.
4 - 6	Knowledge and understanding of aim(s) and/or context is appropriate but basic and limited in range OR Knowledge and understanding of aim(s) or context is accurate and detailed. The use of language (including grammar, punctuation and spelling) shows some inaccuracies.
1 - 3	Knowledge and understanding of aim(s) and/or context is superficial and muddled OR Knowledge and understanding of aims or context is appropriate but basic in detail and limited in range. Language including grammar, punctuation and spelling has errors.
0	No relevant knowledge or understanding.

Q.2 Outline the procedures of Gardner & Gardner's (1969) research '*Teaching Sign Language to a Chimpanzee*'. **[12]**

Credit **could** be given for the following:

- Biographical data of Washoe.
- Description of Washoe's routine.
- Description of techniques used to teach Washoe ASL.
- Description of the observation strategies used by the researchers.
- Other relevant details.

Marks	AO1
10 - 12	Knowledge and understanding of procedures is accurate and well detailed. Language (including grammar, punctuation and spelling) is relevant, well structured, coherent and accurate.
7 - 9	Knowledge and understanding of procedures is reasonably accurate and less detailed. Language (including grammar, punctuation and spelling) is accurate, structured and clear.
4 - 6	Knowledge and understanding of procedures is accurate but basic and limited in range. Language (including grammar, punctuation and spelling) shows some inaccuracies.
1 - 3	Knowledge and understanding of procedures is superficial and muddled. Language (including grammar, punctuation and spelling) has errors.
0	No relevant knowledge or understanding.

Q.3 Describe the findings **and** conclusions of Gibson & Walk's (1960) research '*The visual Cliff*'. [12]

Credit **could** be given for the following:

- All of the 27 infants who moved off the centre board crawled on the shallow side at least once. Whereas, only 3 attempted to crawl on to the 'deep' side (cliff side).
- Chicks, at an age of less than 24 hours, would always hop off the centre board on to the shallow side, rather than the 'deep' side.
- Kids and lambs never stepped on to the 'deep' side, even at 1 day old.
- Rats showed little preference for the shallow side, as long as they could feel the glass with their whiskers. When the centre board was placed higher than their whiskers, they nearly always descended onto the shallow side.
- Kittens, at 4 weeks old, showed preference for the shallow side and 'froze' when placed onto the 'deep' side or circled back to the centre board. Kittens who had been reared in darkness for their first 27 days of life, crawled onto the shallow and deep side equally. After these kittens were kept in 'normal' lighting conditions, by the end of one week the 'dark-reared' kittens demonstrated similar behaviours to kittens who had been reared in the light.
- Gibson & Walk concluded that most human infants can discriminate depth as soon as they can crawl.
- Gibson & Walk concluded that 'The survival of a species requires that its members develop discrimination of depth by the time they take up independent locomotion' ... 'that such a vital capacity does not depend on possibly fatal accidents of learning in the lives of individuals is consistent with Evolutionary Theory'.
- Other relevant details.

Marks	AO1
10 - 12	Knowledge and understanding of findings and conclusions are accurate and well detailed. Depth and range are displayed, though not necessarily in equal measure. Language (including grammar, punctuation and spelling) is relevant, well structured and accurate.
7 - 9	Knowledge and understanding of findings and conclusions are reasonably accurate and less detailed. Depth or range is displayed. Language (including grammar, punctuation and spelling) is accurate, structured and clear.
4 - 6	Knowledge and understanding of findings and/or conclusions is appropriate but basic and limited in range OR Knowledge and understanding of findings or conclusions is accurate and detailed. Language (including grammar, punctuation and spelling) shows some inaccuracies.
1 - 3	Knowledge and understanding of findings and/or conclusions is superficial and muddled OR Knowledge and understanding of findings or conclusions is appropriate but basic in detail and limited in range. Language (including grammar, punctuation and spelling) has errors.
0	No relevant knowledge or understanding.

SECTION B

- Q.4** Evaluate the methodology of Langer & Rodin's (1976) research '*The effects of choice and enhanced personal responsibility for the aged: A field experiment in an institutional setting*'. **[12]**

Credit **could** be given for the following:

- Methodological issues – field based, e.g. advantages such as the ability to utilise the 'real-life' environment of the nursing home; disadvantages such as problems establishing control over the individual characteristics of the residents in the RIG and CG.
- Validity issues (internal/external) e.g. does giving the elderly a plant to look after really induce a sense of control/responsibility.
- Reliability issues (internal/external) e.g. age of residents was inconsistent when completing the research.
- Ethical issues, e.g. lack of informed consent by the nursing home residents; use of intervention study; protection of the residents' physical and psychological well-being.
- Sampling issues, e.g. generalising from residents in one nursing home to other elderly individuals.
- Other methodological issues.

Marks	AO2
10 - 12	Evaluation of methodology is clearly structured, thorough and there is evidence of coherent elaboration. Depth and range are displayed, although not necessarily in equal measure.
7 - 9	Evaluation of methodology shows some coherence; depth or range is displayed in an effective manner.
4 - 6	Evaluation of methodology is appropriate but limited.
1 - 3	Evaluation of methodology is superficial. Material is muddled.
0	No relevant evaluation.

- Q.5** Evaluate the methodology of Rahe, Mahan & Arthur's (1970) research '*Prediction of near-future health change from subjects' preceding life changes*'. **[12]**

Credit **could** be given for the following:

- Methodological issues – questionnaires, e.g. advantages such as easier/quicker to attempt large-scale research than interviews; disadvantages such as social desirability bias.
- Validity issues (internal/external) e.g. use of SRE to assess the 'stress' levels of naval personnel.
- Reliability issues (internal/external) e.g. issues relating to the consistency of interpretation of the inventory of life changes with over 2,664 men.
- Ethical issues, e.g. lack of consent – naval personnel unaware that medical records were being correlated with SRE data (but is this necessarily appropriate? naval personnel not civilians).
- Sampling issues, e.g. sample potentially biased in terms of gender, age and physical fitness.
- Other methodological issues.

Marks	AO2
10 - 12	Evaluation of methodology is clearly structured, thorough and there is evidence of coherent elaboration. Depth and range are displayed, although not necessarily in equal measure.
7 - 9	Evaluation of methodology shows some coherence; depth or range is displayed in an effective manner.
4 - 6	Evaluation of methodology is appropriate but limited.
1 - 3	Evaluation of methodology is superficial. Material is muddled.
0	No relevant evaluation.

Q.6 With reference to alternative evidence, critically assess Asch's (1955) research '*Opinions and social Pressure*'. [12]

Credit **could** be given for the following:

Alternative evidence can be supportive or contradictory and could be published before **or** after the core study. Relevant issues and alternative evidence might include discussion of the following:

- Explanations of conformity or independent behaviour.
- Gender bias – Neto (1995) investigated conformity using female psychology students in a Portuguese university. 59% conformed at least once and the participants reported considerable distress as a result of group pressure.
- Developments in the measurement of conformity – Sherif (1936) found that when using the autokinetic effect groups of subjects tended to compromise, their judgements being influenced by the others in the groups, even though many of the participant denied the influence.
- Cultural bias – Bond & Smith (1996) conducted a meta-analysis of 133 conformity studies using an Asch-type line judgement task from 17 countries. They found that individualism-collectivism of the culture was found to be significantly related to conformity. Collectivist cultures (e.g. Africa & Asia) tended to show higher levels of conformity than individualist cultures (e.g. Britain and United States of America).
- Historical bias – Perrin & Spencer (1980) carried out an exact replication of the original Asch experiment using engineering, mathematics and chemistry students from British Universities as participants. However, they found that on only 1 out of 396 critical trials did a naïve participant conform.
- Other relevant evidence.

Marks	AO2
10 - 12	Evaluation of the core study is clearly structured and thorough with clear, overt references to more than one piece of alternative evidence. Depth and range are displayed, although not necessarily in equal measure.
7 - 9	Evaluation of the core study shows some coherence and is reasonably thorough with clear reference to more than one piece of alternative evidence. Depth or range is displayed.
4 - 6	Evaluation of the core study is appropriate, but limited. There is some reference to alternative evidence.
1 - 3	Evaluation of the core is superficial. Reference to alternative evidence is muddled and/or incoherent OR Makes minimal evaluative comments only (e.g. this 'supports'/'contradicts' the core study).
0	No relevant evaluation of the core study OR Describes alternative evidence but makes no evaluative connection to the core study.

SECTION C

- Q.7** A team of psychologists conducted an observation to investigate whether boys or girls at a local school are more likely to disobey uniform rules. They observed an opportunity sample of school students during lunchtime and recorded the number of rules broken with their uniform (e.g. shirt un-tucked, tie not done up properly). After observing 10 boys and 10 girls the psychologists then presented the modal scores of the number of uniform rules broken in the table below.

	Modal number of uniform rules broken
Boys	2
Girls	5

- (a) Outline **one** advantage and **one** disadvantage of using an observation in this research. **[3]**

Credit **could** be given for:

- Advantage e.g. allows for greater validity and fewer demand characteristics because it takes place in a 'real world' situation, e.g. a school could not be replicated in a laboratory.
- Disadvantage e.g. does not establish cause and effect between gender and obedience.
- Other appropriate advantage and disadvantage.

Marks	AO3
3	An appropriate advantage and disadvantage are identified and both are clearly linked to the novel situation.
2	An appropriate advantage and disadvantage are identified and there are weak links to the novel situation OR An appropriate advantage and disadvantage are noted but only one of these is clearly linked to the novel situation.
1	An appropriate advantage and disadvantage are identified and there are no links to the novel situation OR An appropriate advantage or disadvantage is noted with a weak link to the novel situation.
0	An appropriate advantage or disadvantage is noted but there is no link to the novel situation OR The issue is not addressed.

- (b) Identify **one** issue of reliability in this research and describe how you could deal with this issue of reliability. [3]

Credit **could** be given for:

- Issue of reliability e.g. more than one psychologist is observing the uniform of the students and may interpret broken rules differently.
- Way of dealing with issue e.g. psychologists are standardised about how to assess uniform.
- Other appropriate issue of reliability and way of dealing with it.

Marks	AO3
3	An appropriate issue of reliability and an appropriate way of dealing with the identified issue are identified and linked to the novel situation.
2	An appropriate issue of reliability and an appropriate way of dealing with the identified issue are identified with a weak link to the novel situation.
1	An appropriate issue of reliability and an appropriate way of dealing with the identified issue are identified but with no link to the novel situation OR An appropriate issue of reliability is identified only and linked to the novel situation.
0	The issue of reliability and way of dealing with it are inaccurate OR The issue of reliability is not addressed.

- (c) Identify **one** issue of validity in this research and describe how you could deal with this issue of validity. [3]

Credit **could** be given for:

- Issues of validity (internal/external) e.g. is it measuring disobedience to uniform rules or conformity to peer pressure?
- Way of dealing with issue, e.g. conduct a follow-up interview asking the school students about why they have broken uniform rules.
- Other appropriate issue of validity and way of dealing it.

Marks	AO3
3	An appropriate issue of validity and an appropriate way of dealing with the identified issue are identified and linked to the novel situation.
2	An appropriate issue of validity and an appropriate way of dealing with the identified issue are identified and with a weak link to the novel situation.
1	An appropriate issue of validity and an appropriate way of dealing with the identified issue are identified but with no links to the novel situation OR An appropriate issue of validity is identified only and linked to the novel situation.
0	The issue of validity and way of dealing with it are inaccurate OR The issue of validity is not addressed.

- (d) Outline **one** advantage and **one** disadvantage of opportunity sampling in this research. [3]

Credit **could** be given for:

- Advantage e.g. researchers save time and expense by using local school students compared to other sampling techniques.
- Disadvantage e.g. the students at the local school may not be representative of all school children and, therefore, issue of generalisability with results.
- Other appropriate advantage and disadvantage.

Marks	AO3
3	An appropriate advantage and disadvantage are outlined and, both are linked to the novel situation.
2	An appropriate advantage and disadvantage are outlined; there are weak links to the novel situation OR An appropriate advantage and disadvantage are noted but only one of these is clearly linked to the novel situation.
1	An appropriate advantage and disadvantage are outlined but there are no links to the novel situation OR An appropriate advantage or disadvantage is noted with some link to the novel situation.
0	An appropriate advantage or disadvantage is noted but there is no link to the novel situation OR The issue is not addressed

- (e) Discuss **one** ethical issue that might arise in this research. [3]

Credit **could** be given for:

- Failure to protect a participant's physical or psychological health during research as the school children as the school children may feel uncomfortable being observed by strangers.
- Other appropriate ethical issue.

Marks	AO3
3	An appropriate ethical issue is identified and thoroughly discussed with clear links to the novel situation.
2	An appropriate ethical issue is identified and reasonably discussed with some link to the novel situation.
1	An appropriate ethical issue is discussed but with no links to the novel situation OR A reasonable ethical discussion which is clearly linked to the scenario but the issue is not clearly identified.
0	An ethical issue is not discussed.

- (f) State **one** conclusion that can be drawn from the modal values in this research.

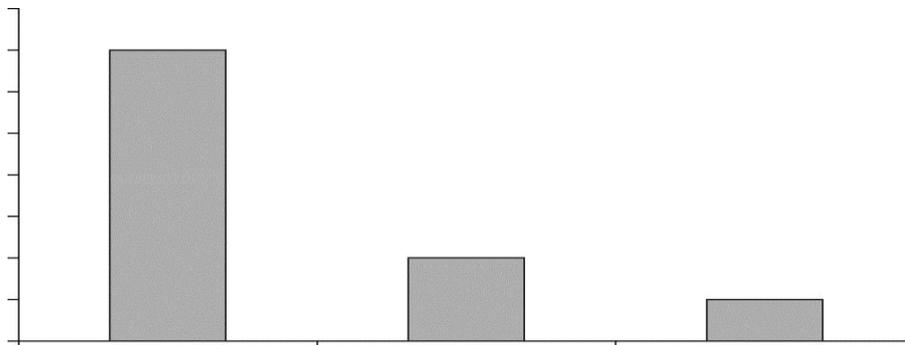
[3]

Credit **could** be given for:

- Example - The modal number of uniform rules broken for the girls (5) was higher than the modal number of uniform errors for the boys (2).
- Other appropriate conclusion.

Marks	AO3
3	An appropriate and accurate conclusion has been stated fully and clearly with a link to the data in the novel situation.
2	An appropriate and accurate conclusion has been stated with a weak link to the novel situation OR An inferential conclusion has been given which has been clearly linked to the data in the novel situation.
1	An appropriate and accurate conclusion has been stated but there is no link to the novel situation OR An inferential conclusion has been noted.
0	An inappropriate or inaccurate conclusion has been stated OR the issue is not addressed.

- Q.8** A team of psychologists conducted a laboratory experiment to investigate if dancing for 5 minutes changes happiness ratings. They chose a stratified sample of various age ranges. The researchers asked the participants to rate how happy they were on a 6 point scale (0 not happy, to 5 very happy). They then asked the participants to dance for 5 minutes and rate their happiness again, using the same 6 point scale. The results were presented in the bar chart below.



- (a) Outline **one** advantage and **one** disadvantage of using a laboratory experiment in this research. **[3]**

Credit **could** be given for:

- Advantage, e.g. allows psychologists to draw cause and effect conclusions between dancing for 5 minutes and changes in happiness.
- Disadvantage, e.g. higher risk of demand characteristics as participants are asked to rate happiness in a laboratory environment.
- Other appropriate advantage and disadvantage.

Marks	AO3
3	An appropriate advantage and disadvantage are identified and both are linked to the novel situation.
2	An appropriate advantage and disadvantage are identified and; there are some links to the novel situation OR An appropriate advantage and disadvantage are noted but only one of these is clearly linked to the novel situation.
1	An appropriate advantage and disadvantage are noted but there is no link to the novel situation OR An appropriate advantage or disadvantage is noted with a weak link to the novel situation.
0	An appropriate advantage or disadvantage is noted but there is no link to the novel situation OR The issue is not addressed.

- (b) Identify **one** issue of reliability in this research and describe how you could deal with this issue of reliability. [3]

Credit **could** be given for:

- Issue of reliability, e.g. whether the researchers are all consistent in their instructions to participants about how to rate their happiness.
- Way of dealing with issue e.g. make sure all the psychologists use standardised instructions with participants to assess their happiness.
- Other appropriate issue of reliability and way of dealing with it.

Marks	AO3
3	An appropriate issue of reliability and an appropriate way of dealing with the identified issue are identified and linked to the novel situation.
2	An appropriate issue of reliability and an appropriate way of dealing with the identified issue are identified and with a weak link to the novel situation.
1	An appropriate issue of reliability and an appropriate way of dealing with the identified issue are identified but with no link to the novel situation OR An appropriate issue of reliability is identified only and linked to the novel situation.
0	The issue of reliability and way of dealing with it are inaccurate OR The issue is not addressed.

- (c) Identify **one** issue of validity in this research and describe how you could deal with this issue of validity. [3]

Credit **could** be given for:

- Issues of validity (internal/external) e.g. participants may not tell the truth about their happiness levels.
- Way of dealing with issue, e.g. remind the participants they need to be truthful when reporting their happiness levels.
- Other appropriate issue of validity and way of dealing it.

Marks	AO3
3	An appropriate issue of validity and an appropriate way of dealing with the identified issue are identified and linked to the novel situation.
2	An appropriate issue of validity and an appropriate way of dealing with the identified issue are identified with a weak link to the novel situation.
1	An appropriate issue of validity and an appropriate way of dealing with the identified issue are identified but with no links to the novel situation OR An appropriate issue of validity is identified only and linked to the novel situation.
0	The issue of validity and way of dealing with it are inaccurate OR The issue of validity is not addressed.