# Q.4 Discuss the similarities and differences of the biological and cognitive approaches [12]

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

- The influence of internal/external factors (nature vs nurture).
- Reductionism.
- Determinism vs free will.
- Investigative methods used to study behaviour.
- Objective/scientific nature of the approaches.
- Use of human and non-human animals.
- Effectiveness of therapeutic techniques.
- Any other relevant material.

Marks	AO2
10-12	Analysis is thorough, clearly structured and there is coherent elaboration of relevant similarities and differences. Depth and range of analysis are displayed though not necessarily in equal measure.
7-9	Analysis is reasonably thorough and coherent, with both similarities and differences. Depth or range of analysis is displayed.
4-6	Analysis is limited and basic; there are similarities and/or differences.
1-3	Analysis is superficial; material is muddled and/or incoherent.
0	No relevant analysis.

[12]

**Q.5** Apply and discuss the methodology used by the cognitive approach.

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

- Use of introspection.
- Use of laboratory experimental.
- Use of case studies, for example, in memory research.
- Controlled, experimental nature of the approach.
- Issues of replicability.
- Issues of objectivity/falsifiability.
- 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 <b>and/or</b> weaknesses.
1-3	Statement of method(s) is explained in a limited manner. Evaluation of method(s) is limited with evidence of strengths <b>and/or</b> weaknesses. Evaluation of method(s) is superficial and very limited.
0	No relevant explanation or evaluation.

#### **GCE PSYCHOLOGY**

### PY2 Mark Scheme - Summer 2015

#### **SECTION A**

Q.1 In 1960, Gibson & Walk published their research, The Visual Cliff. Outline both the aims and the context of this particular research. [12]

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

#### Aims such as:

 Gibson & Walk aimed 'to investigate if infants could discriminate depth by the time they were able to move independently' or 'they wanted to assess whether an infant's perception and cliff avoidance behaviours were an innate characteristic.'

## Context (evidence prior to research) such as:

- Description of what depth perception is, including examples of monocular and binocular cues.
- The views of Nativists (e.g. Gibson, 1950) Empiricists and Interactionists.
- · Description of visual system.
- · Other relevant details.

Marks	AO1
10 - 12	Knowledge and understanding of aim(s) <b>and</b> 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) <b>and</b> context is reasonably accurate but 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) <b>and/or</b> context is appropriate but basic and limited in range <b>OR</b> Knowledge and understanding of aim(s) or context is accurate and detailed. Language (including grammar, punctuation and spelling) shows some inaccuracies.
1 - 3	Knowledge and understanding of aim(s) <b>and/or</b> context is superficial and muddled <b>OR</b> Knowledge and understanding of aims or context is appropriate but basic in detail and limited in range. Language (including grammar, punctuation and spelling) shows many inaccuracies.
0	No relevant knowledge or understanding.

Q.2 In 1955, Asch produced his research, Opinions and Social Pressure. Describe the procedures used by Asch in this research. [12]

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

- Sample details 123 male college students divided into groups of between 7-9 participants.
- Nature of 'visual judgement test' match vertical line length; 12/18 were 'critical'; verbal reporting.
- Seating order of confederates and naïve participants.
- Description of post-research interview.
- Description of modifications cited by Asch in the 1955 article such as truthful partner, deserting partner (no reason and good reason).
- Other relevant details.

Marks	AO1
10 - 12	Knowledge and understanding of procedures 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 procedures is reasonably accurate but less detailed. Depth or range is displayed. Language (including grammar, punctuation and spelling) is accurate, structured and clear.
4 - 6	Knowledge and understanding of procedures is appropriate but basic and limited in range <b>OR</b> Knowledge and understanding of aim(s) or context is accurate and detailed. 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 In 1984, Bennett-Levy and Marteau published their research 'Fear of Animals: what is prepared?' Outline **both** the findings **and** the conclusions of this particular research.

[12]

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

- Mean ratings for Fear, e.g. Rat 2.08, Jellyfish 1.81, Spider 1.64
- Mean ratings for Nearness, e.g. Rat 3.90, Cockroach 3.25, Jellyfish 2.95
- Mean ratings for Ugly, e.g. Slug 2.63, Cockroach 2.53, Spider 2.43
- Mean ratings for Slimy, e.g. Slug 2.90, Jellyfish 2.47, Worm 2.45
- Mean ratings for Speedy, e.g. Lizard 2.53, Grasshopper 2.48, Squirrel 2.44
- Mean ratings for Moves suddenly e.g. Lizard 2.78, Grasshopper 2.77, Squirrel 2.71
- Ratings from the correlation matrix, e.g. Fear/Ugly 0.82, Fear/Slimy 0.61
- Conclusions such as 'perceptual characteristics of animals are of *some* importance in determining positive or negative appraisal by humans'.
- Other relevant details.

Marks	AO1
10 - 12	Knowledge and understanding of findings <b>and</b> conclusions are accurate and well detailed. Depth and range are displayed, though not necessarily in equal measure. Language (including grammar, punctuation and spelling) is well structured, coherent and accurate.
7 - 9	Knowledge and understanding of findings <b>and</b> conclusions are reasonably accurate but 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 <b>and/or</b> conclusions is appropriate but basic and limited in range <b>OR</b> 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 <b>and/or</b> conclusions is superficial and muddled <b>OR</b> 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 Assess the methodology used by Buss in his 1989 research, 'Sex differences in human mate preferences'. [12]

Credit could be given for the following:

- Methodological issues questionnaires, e.g. advantages easier/quicker to attempt large-scale research than interviews, disadvantages such as social desirability bias.
- Validity issues (internal, external) e.g. use of scales to measure desirable characteristics in a mate.
- Reliability issues (internal, external) e.g. issues relating to the consistency of translation.
- Ethical issues, e.g. socially sensitive due to reinforcing double standard; few ethical issues.
- Sampling issues, e.g. issues with the various techniques used in different samples, young mean age.
- Other relevant methodological issues.

Marks	AO2
10 - 12	Assessment 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	Assessment of methodology shows some coherence; depth or range is displayed in an effective manner.
4 - 6	Assessment of methodology is appropriate but limited.
1 - 3	Assessment of methodology is superficial. Material is muddled.
0	No relevant evaluation.

Q.5 Assess the methodology used by Rosenhan in his 1973 research, 'On Being Sane in Insane Places'. [12]

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

- Methodological issues participant observation, e.g. advantages such as researcher gained first-hand insight into actual behaviour.
- Validity issues (internal, external) e.g. pseudo patients may have demonstrated observer bias.
- Reliability issues (internal, external) e.g. consistency of pseudo patient's observations.
- Ethical issues, e.g. discussion of invasion of privacy; deception of hospital staff and patients.
- Sampling issues, e.g. limited application to other cultures as all hospitals in USA.
- Other relevant methodological issues.

Marks	AO2
10 - 12	Assessment 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	Assessment of methodology shows some coherence; depth or range is displayed in an effective manner.
4 - 6	Assessment of methodology is appropriate but limited.
1 - 3	Assessment of methodology is superficial. Material is muddled.
0	No relevant evaluation.

Q.6 Critically analyse and evaluate Gardner and Gardner's (1969) research, 'Teaching Sign Language to a Chimpanzee'. In your answer you should make reference to appropriate alternative evidence. [12]

Alternative evidence can be supportive or contradictory and could be published before **or** after the core study.

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

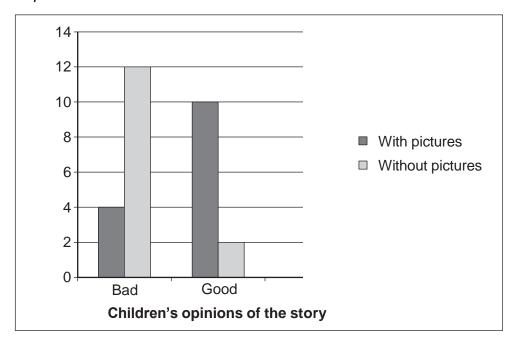
- Behavioural techniques of learning.
- Use of ASL Hayes & Hayes (1952) limited success in teaching Vicki to use a verbal language.
- Problems with productivity Terrace et al (1979) carried out an analysis of the 35 multi-sign sequences which Washoe used in the film 'Teaching Sign Language to the Chimpanzee, Washoe'.
- Later studies of cross-fostered chimps Gardner et al's (1989) findings regarding other chimpanzees, such as Moja, Tatu and Dar.
- Alternatives to ASL Savage-Rumbaugh et al's 1986) findings with Kanzi and the use of the lexigram.
- 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 <b>OR</b> Makes minimal evaluative comments only (e.g. this 'supports'/'contradicts' the core study).
0	No relevant evaluation of the core study <b>OR</b> Describes alternative evidence but makes no evaluative connection to the core study.

#### **SECTION C**

Q.7 A psychologist conducted a laboratory experiment to investigate whether children enjoy a book more if the book has pictures in it. An opportunity sample of 28 children visiting a local library was selected. Later, on arrival at a laboratory, 14 children were given a book with pictures and 14 other children were given a book with the same story but no pictures. They were asked to rate the story as either 'good' or 'bad'. The psychologist then displayed the results in a bar chart (see below).

Fig.1. Bar chart to show the children's opinions of a story when presented with or without pictures.



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

[3]

- Advantage, e.g. the researcher can more easily control the conditions under which the children are reading the story.
- Disadvantage, e.g. the setting of the laboratory may intimidate some of the children so they do not give their real opinion about the story.
- Other appropriate advantage and disadvantage.

Marks	AO3
3	An appropriate advantage and disadvantage are outlined; both are linked to the novel situation.
2	An appropriate advantage and disadvantage are outlined but only one of these is linked to the novel situation.
1	An appropriate advantage and disadvantage are identified and there are no links to the novel situation <b>OR</b> An appropriate advantage or disadvantage is identified with a weak link to the novel situation.
0	An appropriate advantage or disadvantage is identified but there is no link to the novel situation <b>OR</b> No relevant advantage or disadvantage is given.

(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. the children may not have the same reading ability and so some children may not be able to read the story.
- Their way of dealing with issue, e.g. check the children to ensure they are all of a similar age and test their reading ability.
- 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 given issue are identified and linked to the novel situation.
2	An appropriate issue of reliability and an appropriate way of dealing with the given issue are noted and includes one link to the novel situation.
1	An appropriate issue of reliability and an appropriate way of dealing with the given issue are identified but with no link to the novel situation <b>OR</b> An appropriate issue of reliability is identified and linked to the novel situation but not dealt with.
0	The issue of reliability and way of dealing with it are inaccurate <b>OR</b> An 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]

- Issues of validity, e.g. the 'closed' question which gives the two opinion options may not really reflect a child's opinion about the story.
- Way of dealing, e.g. utilise a content analysis of the children's answers to a more 'open' question about their opinion of the story.
- 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 given issue are identified and linked to the novel situation.
2	An appropriate issue of validity and an appropriate way of dealing with the given 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 given issue are identified but with no links to the novel situation <b>OR</b> 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 <b>OR</b> An issue of validity is not addressed.

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

## Credit **could** be given for:

- Advantage, e.g. may be easier and quicker to access a group of children from the local library than using a sampling technique such as quota.
- Disadvantage, e.g. those children selected from the local library will not be representative of all children as they are interested in reading.
- Other appropriate advantage and disadvantage.

Marks	AO3
3	An appropriate advantage and disadvantage are noted, both are linked to the novel situation.
2	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 <b>OR</b> 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 <b>OR</b> No relevant advantage or disadvantage.

(e) Discuss **one** ethical issue that might arise in this research.

[3]

- Failure to obtain informed consent. As the participants are children, they may not fully understand their rights in the research.
- Other appropriate ethical issue.

Marks	AO3
3	An appropriate ethical issue is identified, thoroughly discussed and closely linked to the novel situation.
2	An appropriate ethical issue is identified and reasonably discussed with a link to the novel situation.
1	An appropriate ethical issue is discussed but with no links to the novel situation <b>OR</b> An appropriate ethical issue is discussed and linked to the novel situation but no ethical issue has been clearly identified.
0	An ethical issue is not discussed.

(f) State **one** conclusion that can be drawn from insert words here in this research.

[3]

- More children (10) who read the story with pictures rated the story as 'good' than the children who read the story without pictures (2).
- More children (12) who read the story without pictures rated the story as 'bad' than the children who read the story with pictures (4)
- Other appropriate conclusion.

Marks	AO3
3	An appropriate and accurate conclusion has been stated fully and clearly with links to the novel situation.
2	An appropriate and accurate conclusion has been stated with some link to the novel situation, however, the conclusion may be inferential.
1	An appropriate and accurate conclusion has been stated but there is no link to the novel situation.
0	An inappropriate or inaccurate conclusion has been stated <b>OR</b> The issue is not addressed.

Q.8 A team of psychologists investigated if there is a difference in the depression rates of individuals who were married and individuals who were co-habiting (living together, but not married). A quota sample of 30 married individuals and 30 co-habiting individuals, was selected. The team of psychologists conducted a questionnaire. One question on the questionnaire listed 10 symptoms of depression (e.g. problems with sleeping) and then the individual had to identify which symptoms they had experienced in the last year. The results are displayed in the table below:

Fig 2. Table to show the mean number of depressive symptoms for co-habiting and married individuals.

	Co-habiting individuals	Married individuals
Mean number of depressive symptoms	3.8	4.3

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

- Advantage, e.g. all of the individuals will be given exactly the same list about depression in exactly the same way.
- Disadvantage, e.g. individuals may not tell the truth about their symptoms of depression (social desirability bias).
- Other appropriate advantage and disadvantage.

Marks	AO3
3	An appropriate advantage and disadvantage are noted, both are clearly linked to the novel situation.
2	An appropriate advantage and disadvantage are noted but only one of these is linked to the novel situation.
1	An appropriate issue of reliability and an appropriate way of dealing with the identified issue are noted with no links to the novel situation <b>OR</b> an appropriate advantage or disadvantage is noted with some link to the novel situation but not dealt with.
0	The issue of reliability and way of dealing with it are inaccurate <b>OR</b> An issue of reliability 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. some participants may interpret depressive symptoms differently to other participants.
- Way of dealing with issue, e.g. psychologists should give standardised guidance regarding the nature of the listed depressive symptoms.
- 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 noted and both are linked to the novel situation.
2	An appropriate issue of reliability and an appropriate way of dealing with the identified issue are noted but only one of these is linked to the novel situation.
1	An appropriate advantage and disadvantage are noted but there is no link to the novel situation <b>OR</b> An appropriate advantage or disadvantage is noted with some link to the novel situation.
0	An appropriate advantage or disadvantage is noted and there is no link to the novel situation <b>OR</b> No relevant advantage or disadvantage.

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

- Issues of validity, e.g. extraneous variables, such as length of relationship, may affect results.
- Way of dealing, e.g. ensure the individuals (co-habiting and married) are similar in terms of relationship length.
- 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 given issue are identified and linked to the novel situation.
2	An appropriate issue of validity and an appropriate way of dealing with the given 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 given issue are identified but with no links to the novel situation <b>OR</b> 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 <b>OR</b> No relevant advantage or disadvantage.