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General Certificate of Education

Psychology 1186

Specification B

Unit 1 (PSYB1) Introducing Psychology

Mark Scheme

2009 examination - June series

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SECTION A: KEY APPROACHES AND BIOPSYCHOLOGY

Question 1 (a)
[3 marks: AO1 = 2, AO2 = 1]

AO1 One mark for naming a correct defence mechanism eg denial; repression; displacement, etc.
One further mark for brief description of the defence mechanism.

AO2 One mark for an appropriate suggestion in relation to the breakdown of a close relationship.
Possible answer: Displacement (AO1, 1) is where the mind redirects emotions from a dangerous object to a safer outlet (AO1, 1). A person joins a kickboxing class which relieves his stress by redirecting his anger about his failed relationship (AO2, 1).

If a candidate describes and provides an appropriate example of a defence mechanism but gives an incorrect name award a maximum 2 marks.

Question 1 (b) (i)
[1 mark: AO1 = 1]

AO1 One mark for correct definition of the term eg learning by association, stimulus-response learning, brief description of process or key features.

Question 1 (b) (ii)
[2 marks: AO3 = 2]

AO3 Candidates may provide a generic response through methods of research eg experimentation or a more specific response eg the process involved within a particlar study.

Possible answer: Pavlov researched classical conditioning by pairing a CS with an UCS – he rang a bell at the same time he presented food to the dog (AO3, 1). After repeated pairings, Pavlov found that by merely ringing the bell (CS), the dog salivated (CR) (AO3, 1).

Credit diagrammatic representation.

Question 1 (c)
[4 marks: AO3 = 4]

AO3 Candidates should receive credit for knowledge of the approaches and are not expected to demonstrate detailed knowledge of aggression.

Biological: One mark for brief or muddled explanation.
Two marks for an accurate and detailed explanation.
Likely answers: testosterone; aggression as an evolutionary trait, genetics; heritability, etc.
Behaviourist: One mark for brief or muddled explanation.
Two marks for an accurate and detailed explanation.
Likely answers: learning by association; principles of operant conditioning; reinforcement.

Credit answers that may refer to the principles of SLT.

Question 1 (d)
[10 marks: AO1 = 5, AO2 = 5]

AO1 Up to five marks for a description of two methods used to identify areas of cortical specialisation in the brain.
Neurosurgery – the deliberate removal of areas of the brain and/or destroying the links between certain areas of the brain.
Post-mortem examinations – a method in which the brain of a patient, usually with some known deficit, is examined after death.
Scanning techniques – PET assesses metabolic activity in different parts of the brain; CAT shows horizontal sections of the brain; MRI gives a clear and detailed picture of brain structures.
Credit description of relevant evidence up to two marks.

AO2 Candidates should discuss the methods described in AO1.
Neurosurgery – greater precision in the location of damage to the brain; comparison of human/non-human behaviour before and after surgery; invasive technique; ethical problems of irreversible change in non-humans; problems of extrapolating findings from animal research to explain human behaviour; problems associated with plasticity; problem in saying the damaged area is a 'centre' for the functioning of a behaviour or just part of an interconnection; problem of reduced functioning of areas adjacent to the damage.
Post-mortem examinations – able to attribute abnormalities in brain with known deficit in patient; repeated examinations produce a more exact correlation; furthers understanding of the brain; difficulty in obtaining a human brain especially if the known deficit is particularly rare; difficulty in locating precise area of damage.
Scanning techniques – provides detailed pictures of areas of brain responsible for certain actions; patient is able to perform tasks whilst conscious; can be non-invasive; issues of injecting radioactive substance with PET scans – invasive procedure; does not always measure precise neuronal activity.
Credit use of relevant evidence.

Maximum 6 marks if only one method.

Mark bands

8 – 10 marks Good answers

There is accurate, well-organised and detailed description of two methods used to investigate areas of cortical specialisation in the brain. Description of the two methods may be imbalanced. The discussion is clear, coherent and detailed. There is focus with little or no misunderstanding.
There is structure with effective use of paragraphs and sentences. There are very few errors of spelling and punctuation.

4 – 7 marks Average answers

There is a reasonably accurate and organised description of the method(s) though it may lack detail. Discussion may lack clarity, coherence or detail. There may be some inaccuracy or irrelevance.

There is some structure with appropriate use of paragraphs and sentences. There are some errors of spelling and punctuation.

1 – 3 marks **Poor answers**

There is basic or limited knowledge/discussion of the method(s). The response may be inaccurate and/or poorly focused.
There is little evidence of structure in terms of correct use of sentences and paragraphs. There are frequent errors of spelling and punctuation.

0 marks **No relevant content**

SECTION B: GENDER DEVELOPMENT

Question 2 (a)
[2 marks: AO3 = 2]

AO3 One mark for identification of an appropriate measure.
Likely answers: BSRI (Bem's Sex Role Inventory); Likert scale; Semantic differential scale, etc.
Accept alternative ways of measuring androgyny eg questionnaires, interviews, case studies, etc.
One further mark for reference to the comparison of masculine and feminine traits.

Note: Candidates may receive full credit for a diagrammatic representation.

Question 2 (b) (i)
[3 marks: AO1 = 3]

AO1 One mark for identification of feature(s) of social learning theory.
Up to two further marks for description of feature(s) .

Feature(s) could include – gender behaviour is learned from the environment (nurture); observation; modelling; imitation; identification; reinforcement; vicarious reinforcement, etc.

Maximum two marks if features of social learning theory are not explicity related to gender.

Question 2 (b) (ii)
[2 marks: AO2 = 2]

AO2 One mark for identification of an appropriate limitation.
One further mark for explanation of the limitation.
Likely answers: ignores the importance of genes and chromosomes in determining gender behaviour (nature); it fails to explain how gender appropriate schemas develop in the first place; it does not account for differences between children of the same sex who have been raised in the same household; generic theory of boys and girls, rather than focus on individual differences, etc.

Credit answers that identify a limitiation by reference to another approach.

Question 2 (c)
[3 marks: AO2 = 3]

AO2 Gender identity – C / A child knows that he is a boy or she is a girl
Gender stability – A / A child understands that he or she stays the same sex over time
Gender constancy – D / A child understands that he or she stays the same sex despite external changes in appearance

Question 2 (d)
[10 marks: AO1 = 5, AO2 = 5]

AO1 Up to five marks for description of biological explanations of gender development. Candidates may focus on how genetic factors cause gender-appropriate behaviour – gender and sex are interrelated. Any differences in gender behaviour are due to physiological differences. Candidates may choose to focus on hormones eg testosterone that controls behaviour such as aggression in men. Atypical sex chromosomes eg XYY – Supermale; XO – Turner's syndrome; XXY – Klinefelter's syndrome may be described in terms of the effect these syndromes have on gender development. Candidates may choose to focus on non-human research eg Gorski et al (1980) found male rats' sexually dimorphic nucleus (SDN) to be larger in anatomical structure compared to female rats' SDN which might account for differences in behaviour. Credit up to two marks for description of relevant evidence.

AO2 Up to five marks for discussion. The response may focus on supporting/conflicting evidence for the biological explanation. For example, Money (1975), in the case of the penectomised twin, suggested that nurture was responsible for gender development thereby rejecting nature. However, in a follow-up study by Diamond (1998), Brenda had never felt happy as a girl and resumed her masculine identity (nature). Diamond injected pregnant rats with testosterone and observed that the female offspring displayed male behaviours such as copulation thereby supporting nature. Candidates may raise methodological issues associated with extrapolation of findings from animal research to explain human behaviour. Candidates may focus on general limitations of the biological explanation eg deterministic; reductionist; sex and gender need not correspond. Alternatively, candidates may contrast the biological explanation of gender development with other explanations such as social learning theory which state that gender is learnt as a result of socialisation (nurture).
Credit use of relevant evidence.

Maximum 6 marks if no reference to evidence.

Mark bands

8 – 10 marks Good answers

There is accurate, well-organised and detailed description of biological explanations of gender development. The discussion is clear, coherent and detailed. There is appropriate evidence in the answer. There is focus with little or no misunderstanding. There is structure with effective use of paragraphs and sentences. There are very few errors of spelling and punctuation.

4 – 7 marks Average answers

There is a reasonably accurate and organised description of some features of biological explanations though it may lack detail. Discussion may lack clarity, coherence or detail. At the top of the band, there is reference to evidence. There may be some inaccuracy or irrelevance. There is some structure with appropriate use of paragraphs and sentences. There are some errors of spelling and punctuation.

1 – 3 marks Poor answers

There is basic or limited knowledge/discussion of biological explanation(s). The response may be inaccurate and/or poorly focused. There is little evidence of structure in terms of correct use of sentences and paragraphs. There are frequent errors of spelling and punctuation.

0 marks No relevant content

SECTION C: RESEARCH METHODS

Question 3 (a)
[2 marks: AO3 = 2]

AO3 One mark for type of correlation shown – a positive correlation. One mark for the interpretation of data eg the higher the nurses' stress score, the more days absent from work.
Credit appropriate alternative answers.

Question 3 (b)
[2 marks: AO3 = 2]

AO3 One mark for a partially correct answer, ie where both variables are present but may not be fully operationalised.
One mark for wording as a prediction of a relationship.
Directional: There will be a positive correlation between stress scores (AO3, 1) and number of days absent from work (AO3, 1).
Non-directional: There will be a relationship between stress scores (AO3, 1) and number of days absent from work (AO3, 1).

Question 3 (c)
[2 marks: AO3 = 2]

AO3 One mark each for an appropriate difference.
Likely answers: IV versus no IV; cause and effect versus no cause and effect; difference versus relationship; control versus no control; manipulation versus no manipulation, etc.

Question 3 (d)
[2 marks: AO3 = 2]

AO3 One mark for identification of an appropriate advantage eg, no manipulation of behaviour required; provides useful information about variables which can be statistically tested; enables predictions to be made; can be used when, for ethical reasons, behaviour cannot be manipulated etc.

One further mark for elaboration of an advantage.

Possible answer: One advantage of conducting a correlational study is that no manipulation of behaviour is required (AO3, 1). This allows researchers to statistically analyse situations that cannot be manipulated experimentally for ethical/practical reasons (AO3, 1).

Question 3 (e)
[2 marks: AO3 = 2]

AO3 One mark – the psychologist identified the target population as all of the nurses in the hospital.

One mark – the psychologist pulled the nurses' names out of a hat/computer-generated sample.

Question 3 (f) (i)
[1 mark: AO3 = 1]

AO3 One mark for appropriate definition of the term.
Possible answer: A pilot study is an initial run-through of the procedures to be used in an investigation (AO3, 1).

Answers should refer to a pilot study being conducted **prior to** the investigation.

Question 3 (f) (ii)
[1 mark: AO3 = 1]

AO3 One mark for a plausible reason.
Likely answers: to check for any ambiguity; any flaws in the test; ensure reliability; prevent a ceiling/floor effect; accuracy of measurement; ensure ethical issues have been addressed, etc.

Question 3 (g)
[2 marks: AO3 = 2]

AO3 One mark for identification of an appropriate strength.
One further mark for outline of the strength.
Likely answers: comparisions can be made between participants; ease of analysis of data; easy to score if questions are closed; keeps interview focused if questions are open; etc.

Possible answer: One strength of using structured interviews is that by having fixed questions it is possible to replicate a study (AO3, 1). In this way, it is possible for a researcher to check for reliability (AO3, 1).

Question 3 (h)
[3 marks: AO3 = 3]

AO3 One mark for identification of an appropriate ethical issue, eg, consent, confidentiality, right to withdraw, protection of participants, etc.
Credit old or revised ethical issues (BPS) eg, respect, integrity, etc.
Up to two marks for explanation of the ethical issue in relation to this study.

Possible answer: Confidentiality (AO3, 1). The psychologist obtained details of the nurses from their personnel files (AO3, 1). The psychologist would therefore have had to ensure that the nurses' identities were kept anonymous (AO3, 1).

Question 3 (l) (i)
[1 mark: AO3 = 1]

AO3 One mark for correct definition of the method.
Possible answer: A case study is an in-depth study of an individual, small group or institution (AO3, 1).

Question 3 (I) (ii)
[2 marks: AO3 = 2]

AO3 One mark for identification of an appropriate limitation.
One further mark for outline of the limitation.
Likely answers: lacks generalisability; researcher bias; difficulties in replication; data usually retrospective; lacks reliability; lacks accuracy/bias on the part of the participant, etc.

Possible answer: One limitation of conducting a case study is that it may be affected by researcher bias (AO3,1). The beliefs/expectations of the researcher may affect their interpretation of the data (AO3, 1).

ASSESSMENT OBJECTIVE GRID – PSYB1

JUNE 2009

QUESTION	AO1	AO2	AO3	TOTAL
1 (a)	2	1		
(b)(i)	1			
(ii)			2	
(c)			4	
(d)				
	5	5		20
2 (a)			2	
(b)(i)	3			
(ii)		2		
(c)		3		
(d)	5	5		
				20
3 (a)			2	
(b)			2	
(c)			2	
(d)			2	
(e)			2	
(f)(i)			1	
(f)(ii)			1	
(g)			2	
(h)			3	
(I)(i)			1	
(I)(ii)			2	
				20
TOTAL				60