

- Q.4** Outline and explain the problems and limitations associated with the use of scientific method in psychology. **[15]**

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

- Examples of relevant research.
- Problems with the nature of scientific methods.
- Issues of ecological (external) validity.
- Issues of researcher and participant effects (e.g. bias and demand characteristics)
- Problems regarding human behaviour as quantifiable.
- Issues related to hypothesis formulation, e.g. operationalisation of variable.
- Any other relevant material.

Marks	AO3
12 - 15	Discussion is appropriate and well detailed. Material is used in an effective manner (evidence of coherent elaboration) and is thorough. Depth and range of knowledge is displayed, though not necessarily in equal measure. Specialist terms are used throughout.
8 - 11	Discussion is reasonably appropriate but less detailed. Material is used in an effective manner. Depth or range of knowledge is displayed. Some specialist terms.
4 - 7	Discussion is basic; material is used in a relevant manner but is limited. Few specialist terms.
1 - 3	Discussion is superficial; material is muddled and/or incoherent. Specialist terms are either absent or are incorrect.
0	No relevant knowledge or understanding of relevant material is demonstrated.

Q.5 Describe and evaluate ethical issues that arise out of **two** applications of psychology in the real world. **[15]**

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

- Use of conditioning theory in advertising.
- Use of persuasive commercials.
- Use of subliminal techniques in advertising.
- Use of psychological techniques in interrogation and treatment of prisoners of war.
- Use of psychological knowledge in recruitment.
- Use of profiling.
- Any other relevant material.

Marks	AO3
12 - 15	Discussion is appropriate and well detailed. Material is used in an effective manner (evidence of coherent elaboration) and is thorough. Depth and range of knowledge is displayed, though not necessarily in equal measure. Specialist terms are used throughout.
8 - 11	Discussion is reasonably appropriate but less detailed. Material is used in an effective manner. Depth or range of knowledge is displayed. Some specialist terms.
4 - 7	Discussion is basic; material is used in a relevant manner but is limited. Few specialist terms.
1 - 3	Discussion is superficial; material is muddled and/or incoherent. Specialist terms are either absent or are incorrect.
0	No relevant knowledge or understanding of relevant material is demonstrated.

GCE Psychology - PY4

Mark Scheme - SUMMER 2015

Q.1 (a) Describe what is meant by the term 'science' in psychology. [3]

Credit **could** be given for:

- A set of historically agreed procedures for investigating events, formulating valid and reliable explanations and providing reliable predictions of future events
- Empirical research
- Any other relevant description.

Marks	AO1
3	A full and accurate description is given with clear reference to psychology.
2	A full and accurate description is given but no clear reference to psychology OR Basic description with some reference to psychology.
1	A basic and limited description is given.
0	No relevant description.

- (b) **With reference to psychological theories and research, discuss the status of psychology as a science.** [22]

Credit **could** be given for:

- Evaluation of psychological research referred to in argument
- Compare and contrast aspects of psychology to present argument structure about scientific nature
- Overall evaluation of status
- Implications of scientific status of psychology
 - Any other relevant material.

Marks	AO2
6 - 7	Evaluation is relevant, clearly structured and thorough. There is evidence of coherent elaboration in the material presented. Depth and range of evaluation are displayed though not necessarily in equal measure.
4 - 5	Evaluation is relevant, structured and shows some coherence in the material presented. Depth or range of evaluation is displayed.
2 - 3	Evaluation shows some relevance but is basic and limited in detail.
1	Some very limited relevant, evaluation is present.
0	No relevant evaluation.

Credit **could** be given for:

- Nature of science as an activity, with appropriate examples (e.g. discovery of brain structures and functions)
- Principles of criteria for distinguishing a science (e.g. predictive validity)
- Examples of psychological research to meet criteria or not (e.g. cognitive neuroscience and psychodynamic approach converging)
- Any other relevant material.

Marks	AO3
12 - 15	Evidence is clearly interpreted and analysed. Conflicting arguments are presented in a structured manner that accurately addresses the question and reaches a reasoned conclusion. Depth and range of evidence are displayed though not necessarily in equal measure.
8 - 11	Evidence is interpreted and analysed. Conflicting arguments are presented effectively and address the question. There are limitations in either the depth and range of evidence presented or in the structure of the argument or in the overall conclusion. Some appropriate terms are used.
4 - 7	Evidence is basic. The material is used in a relevant manner to address the question but the structure of the answer and the conclusion are limited. Few appropriate terms are used.
1 - 3	There is little evidence relating to the question. The answer is confused and/or severely limited in scope. Appropriate terms are either not used or are used incorrectly.
0	No material relevant to the question.

Q.2 (a) Describe what is meant by the term 'free will' in psychology. [3]

Credit **could** be given for:

- Determination of an individual's behaviour by an act of will alone, uninfluenced by other factors
- The feeling of being able to make choices of one's own volition
- Any other relevant description.

Marks	AO1
3	A full and accurate description is given with clear reference to psychology.
2	A full and accurate description is given but no clear reference to psychology OR Basic description with some reference to psychology.
1	A basic and limited description is given.
0	No relevant description.

(b) Discuss the issue of free will and determinism in psychology.**[22]**Credit **could** be given for:

- Standard of evidence used in the argument presented
- Evaluation of specific studies and theories
- Difficulties in establishing the measurement of free will and determinism
- Implications of each approach for therapeutic intervention
- Any other relevant material.

Marks	AO2
6 - 7	Evaluation is relevant, clearly structured and thorough. There is evidence of coherent elaboration in the material presented. Depth and range of evaluation are displayed though not necessarily in equal measure.
4 - 5	Evaluation is relevant, structured and shows some coherence in the material presented. Depth or range of evaluation is displayed.
2 - 3	Evaluation shows some relevance but is basic and limited in detail.
1	Some very limited relevant, evaluation is present.
0	No relevant evaluation.

Credit **could** be given for:

- Research questioning brain functioning and free will (e.g. Libet)
- Behavioural approach and relevant findings (e.g. instrumental conditioning)
- Psychoanalytic approach and relevant research findings (e.g. fixations)
- Humanistic approach and findings (e.g. self-actualisation)
- Any other relevant material.

Marks	AO3
12 - 15	Evidence is clearly interpreted and analysed. Arguments are presented in a structured manner that accurately address the question and reaches a reasoned conclusion. Depth and range of evidence are displayed, although not necessarily in equal measure.
8 - 11	Evidence is interpreted and analysed. Conflicting arguments are presented effectively and address the question. There are limitations in either the depth and range of evidence presented or in the structure of the argument or in the overall conclusion. Some appropriate terms are used.
4 - 7	Evidence is basic. The material is used in a relevant manner to address the question but the structure of the answer and the conclusion are limited. Few appropriate terms are used.
1 - 3	There is little evidence relating to the question. The answer is confused and/or severely limited in scope. Appropriate terms are either not used or are used incorrectly.
0	No material relevant to the question.

Q.3 Discuss alternatives to the multi-store model of memory.**[25]**Credit **could** be given for:

- Other cognitive approaches such as the Working Memory Models
- Other process approaches such as Levels of Processing Theory
- Other reconstructive approaches (e.g. Bartlett, Loftus).
- Any other relevant material.

Marks	AO1
8 - 10	Knowledge and understanding of evidence is accurate and well detailed. Depth and range of knowledge are displayed though not necessarily in equal measure. Language (grammar, punctuation and spelling) is relevant, well-structured and accurate.
6 - 7	Knowledge and understanding of evidence is reasonably accurate, and less detailed. Depth or range of knowledge is displayed. Language (including grammar, punctuation and spelling) is accurate, structured and clear.
4 - 5	Knowledge and understanding of evidence is appropriate but basic in detail. Language (including grammar, punctuation and spelling) shows some inaccuracies.
1 - 3	Knowledge and understanding is superficial and/or muddled. Language (including grammar, punctuation and spelling) has errors.
0	No relevant knowledge or understanding displayed.

Credit **could** be given for:

- Comparisons between the MSM and other approaches and models
- Specific evaluations of alternatives to the MSM
- Global comment about approaches and models in this field
- Any other relevant material

Marks	AO2
12 -15	Evaluation is relevant, clearly structured and thorough. There is coherent elaboration in the material presented. Depth and range of evaluation are displayed though not necessarily in equal measure.
8 - 11	Evaluation is relevant, structured and shows some coherence in the material presented. Depth or range of evaluation is displayed.
4 - 7	Evaluation shows some relevance but is basic and limited in detail.
1 - 3	Some very limited, relevant evaluation is present.
0	No relevant evaluation.

Q.4 Describe and evaluate the benefits of relationships on psychological well-being. [25]

Credit **could** be given for:

- Evolutionary background for group behaviour and relationships.
- Primary relationship of carer and child (e.g. attachment, deprivation).
- Secondary relationships (friends, peers).
- Romantic and pair bonding relationships (e.g. marriage benefits for psychological health).
- Electronic and mediated relationships (e.g. emotional buffering, risk diminution).
- Any other relevant material.

Marks	AO1
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4 - 5	Knowledge and understanding of evidence is appropriate but basic in detail. Language (including grammar, punctuation and spelling) shows some inaccuracies.
1 - 3	Knowledge and understanding is superficial and/or muddled. Language (including grammar, punctuation and spelling) has errors.
0	No relevant knowledge or understanding displayed.

Credit **could** be given for:

- Bias in psychological theories (e.g. ethnocentrism, orientation, stereotypical theorising about marriage etc).
- Limitations of research base (e.g. understudied relationships).
- Evaluation of theories and research (e.g. was Bowlby right?).
- Any other relevant material.

Marks	AO2
12 - 15	Evaluation is relevant, clearly structured and thorough. There is evidence of coherent elaboration in the material presented. Depth and range of evaluation is displayed though not necessarily in equal measure.
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4 - 7	Evaluation shows some relevance but is basic and limited in detail.
1 - 3	Some very limited, relevant evaluation is present.
0	No relevant evaluation.

Q.5 Analyse and evaluate issues relating to the measurement of intelligence. [25]

Credit **could** be given for:

- Variations in the definition of intelligence
- General intelligence measurement (e.g. Stanford Binet, Weschier, BAS)
- Multiple intelligence theories and measurement (e.g. Gardner, Sternberg)
- Any other relevant material.

Marks	AO1
8 - 10	Knowledge and understanding of evidence is accurate and well detailed. Depth and range of knowledge are displayed though not necessarily in equal measure. Language (including grammar, punctuation and spelling) is relevant, well-structured and accurate.
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0	No relevant knowledge or understanding displayed.

Credit **could** be given for:

- Questions relating to definitions of intelligence
- Cross-cultural differences in definition of intelligence.
- Specific methodological issues such as the measurement of intelligence
- Historical, and political issues
- Any other relevant material.

Marks	AO2
12 - 15	Evaluation is relevant, clearly structured and thorough. There is evidence of coherent elaboration in the material presented. Depth and range of evaluation is displayed though not necessarily in equal measure.
8 - 11	Evaluation is relevant, structured and shows some coherence in material presented. Depth or range of evaluation is displayed.
4 - 7	Evaluation shows some relevance but is basic and limited in detail.
1 - 3	Some very limited, relevant evaluation is present.
0	No relevant evaluation

Q.6 With reference to psychological knowledge and research findings, discuss the effects of events in Middle adulthood. [25]

Credit **could** be given for:

- Definition of 'Middle adulthood'
- Stage theories relating to events in Middle adulthood and the effects on the person proposed (e.g. Erikson, Levinson, Gould).
- Culture-specific markers of transition in through and out of Middle adulthood
- Any other relevant material.

Marks	AO1
8 - 10	Knowledge and understanding of evidence is accurate and well detailed. Depth and range of knowledge are displayed though not necessarily in equal measure. Language (including grammar, punctuation and spelling) is relevant, well-structured and accurate.
6 - 7	Knowledge and understanding of evidence is reasonably accurate, and less detailed. Depth or range of knowledge is displayed. Language (including grammar, punctuation and spelling) is accurate, structured and clear.
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1 - 3	Knowledge and understanding is superficial and/or muddled. Language (including grammar, punctuation and spelling) has errors.
0	No relevant knowledge or understanding displayed.

Credit **could** be given for:

- Issues in Middle adulthood and the effects on the person (e.g. partnerships, parenting, separations)
- Criticism of stage theories, cultural differences
- Critical research material on middle adulthood
- Any other relevant material.

Marks	AO2
12 -15	Evaluation is relevant, clearly structured and thorough. There is evidence of coherent elaboration in the material presented. Depth and range of evaluation is displayed though not necessarily in equal measure.
8 - 11	Evaluation is relevant, structured and shows some coherence in the material presented. Depth and range of evaluation is displayed.
4 - 7	Evaluation shows some relevance but is basic and limited in detail.
1 - 3	Some very limited, relevant evaluation is present.
0	No relevant evaluation.

Q.7 Describe and evaluate explanations for the nature of dreams. [25]

Credit **could** be given for:

- Nature of phenomenon (e.g. REM sleep, real time dreaming)
- Biological theories (e.g. reverse-learning, activation-synthesis)
- Psychological theories (e.g. integration of information into LTM, psychodynamic theories)
- Any other relevant material.

Marks	AO1
8 - 10	Knowledge and understanding of evidence is accurate and well detailed. Depth and range of knowledge are displayed though not necessarily in equal measure. Language (including grammar, punctuation and spelling) is relevant, well-structured and accurate.
6 - 7	Knowledge and understanding of evidence is reasonably accurate, and less detailed. Depth or range of knowledge is displayed. Language (including grammar, punctuation and spelling) is accurate, structured and clear.
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1 - 3	Knowledge and understanding is superficial and/or muddled. Language (including grammar, punctuation and spelling) has errors.
0	No relevant knowledge or understanding displayed.

Credit **could** be given for:

- Methodological problems (e.g. low ecological validity of lab studies, measurement of subjective content)
- Critical research relating to biological theories
- Critical research relating to psychological theories
- Criticism of concept (e.g. dreams as epiphenomena)
- Any other relevant material.

Marks	AO2
12 -15	Evaluation is relevant, clearly structured and thorough. There is evidence of coherent elaboration in the material presented. Depth and range of evaluation is displayed though not necessarily in equal measure.
8 - 11	Evaluation is relevant, structured and shows some coherence in the material presented. Depth or range of evaluation displayed.
4 - 7	Evaluation shows some relevance but is basic and limited in detail.
1 - 3	Some very limited, relevant evaluation is present.
0	No relevant evaluation

Q.8 With reference to psychological theories and research findings discuss the treatment of addiction. [25]

Credit **could** be given for:

- Nature of addiction (e.g. physical dependency, wider definition)
- Biological treatments (e.g. drug substitution, aversive substances)
- Psychological treatments (e.g. aversive conditioning, cognitive behavioural therapy)
- Social treatments (e.g. support groups)
- Any other relevant material.

Marks	AO1
8 - 10	Knowledge and understanding of evidence is accurate and well detailed. Depth and range of knowledge are displayed though not necessarily in equal measure. Language (including grammar, punctuation and spelling) is relevant, well-structured and accurate.
6 - 7	Knowledge and understanding of evidence is reasonably accurate, and less detailed. Depth or range of knowledge is displayed. Language (including grammar, punctuation and spelling) is accurate, structured and clear.
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1 - 3	Knowledge and understanding is superficial and/or muddled. Language (including grammar, punctuation and spelling) has errors.
0	No relevant knowledge or understanding displayed.

Credit **could** be given for:

- Criticism of addiction as unitary phenomenon
- Critical research relating to biological treatments
- Critical research relating to psychological treatments
- Critical research relating to social treatments (e.g. alteration of laws to enable treatments without punishment in some countries)
- Any other relevant material.

Marks	AO2
12 -15	Evaluation is relevant, clearly structured and thorough. There is evidence of coherent elaboration in the material presented. Depth and range of evaluation is displayed though not necessarily in equal measure.
8 - 11	Evaluation is relevant, structured and shows some coherence in the material presented. Depth and range of evaluation is displayed.
4 - 7	Evaluation shows some relevance but is basic and limited in detail.
1 - 3	Some very limited, relevant evaluation is present.
0	No relevant evaluation.

Q.9 Discuss the effect of individual differences in learning styles.**[25]**Credit **could** be given for:

- Historical context
- Models and theories of learning styles (e.g. Curry, Grasha)
- Contemporary theories (e.g. Visual, Auditory, Kinaesthetic)
- Any other relevant material.

Marks	AO1
8 - 10	Knowledge and understanding of evidence is accurate and well detailed. Depth and range of knowledge are displayed though not necessarily in equal measure. Language (including grammar, punctuation and spelling) is relevant, well-structured and accurate.
6 - 7	Knowledge and understanding of evidence is reasonably accurate, and less detailed. Depth or range of knowledge is displayed. Language (including grammar, punctuation and spelling) is accurate, structured and clear.
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1 - 3	Knowledge and understanding is superficial and/or muddled. Language (including grammar, punctuation and spelling) has errors.
0	No relevant knowledge or understanding displayed.

Credit **could** be given for:

- Investigative evidence (e.g. Riding & Watts)
- Modern brain research critical of sensory separation
- Self-perpetuating beliefs in education (gender and cultural differences) - are they valid?
- Any other relevant material.

Marks	AO2
12 -15	Evaluation is relevant, clearly structured and thorough. There is evidence of coherent elaboration in the material presented. Depth and range of evaluation is displayed though not necessarily in equal measure.
8 - 11	Evaluation is relevant, structured and shows some coherence in the material presented. Depth and range of evaluation is displayed.
4 - 7	Evaluation shows some relevance but is basic and limited in detail.
1 - 3	Some very limited, relevant evaluation present.
0	No relevant evaluation.

Q.10 Comment on the treatment and punishment of crime with reference to psychological theories and research findings. [25]

Credit **could** be given for:

- Historical developments in punishment and treatment
- Psychological aspects of punishment (e.g. Skinner)
- Psychological basis for treatments of offenders
- Specific treatment for offenders (e.g. anger management, social skills training)
- Any other relevant material.

Marks	AO1
8 - 10	Knowledge and understanding of evidence is accurate and well detailed. Depth and range of knowledge are displayed though not necessarily in equal measure. Language (including grammar, punctuation and spelling) is relevant, well-structured and accurate.
6 - 7	Knowledge and understanding of evidence is reasonably accurate, and less detailed. Depth or range of knowledge is displayed. Language (including grammar, punctuation and spelling) is accurate, structured and clear.
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1 - 3	Knowledge and understanding is superficial and/or muddled. Language (including grammar, punctuation and spelling) has errors.
0	No relevant knowledge or understanding displayed.

Credit **could** be given for:

- Moral and ethical debates around concept of punishment (e.g. Zimbardo and 'torture', treatment vs punishment)
- Critical research relating to treatments
- Assumptions relating to the nature of criminality (e.g. free will vs determinism)
- Any other relevant material.

Marks	AO2
12 -15	Evaluation is relevant, clearly structured and thorough. There is evidence of coherent elaboration in the material presented. Depth and range of evaluation is displayed though not necessarily in equal measure
8 - 11	Evaluation is relevant, structured and shows some coherence in the materials presented. Depth and range of evaluation is displayed.
4 - 7	Evaluation shows some relevance but is basic and limited in detail.
1 - 3	Some very limited, relevant evaluation is present.
0	No relevant evaluation.

Q.11 Describe and evaluate how sporting performance is affected by internal factors.

[25]

Credit **could** be given for:

- Motivational factors (e.g. need for achievement competence motivation)
- Cognitive factors (e.g. attentional focus, use of imagery)
- Emotional factors (e.g. state/trait anxiety, mood states)
- Biological factors (e.g. hormone cycles, performance enhancing drugs)
- Abnormal factors (e.g. anger management, ultra-endurance athletes and mental health status)
- Any other relevant material.

Marks	AO1
8 - 10	Knowledge and understanding of evidence is accurate and well detailed. Depth and range of knowledge are displayed though not necessarily in equal measure. Language (including grammar, punctuation and spelling) is relevant, well-structured and accurate.
6 - 7	Knowledge and understanding of evidence is reasonably accurate, and less detailed. Depth or range of knowledge is displayed. Language (including grammar, punctuation and spelling) is accurate, structured and clear.
4 - 5	Knowledge and understanding of evidence is appropriate but basic in detail. Language (including grammar, punctuation and spelling) shows some inaccuracies.
1 - 3	Knowledge and understanding is superficial and/or muddled. Language (including grammar, punctuation and spelling) has errors.
0	No relevant knowledge or understanding displayed.

Credit **could** be given for:

- Measurement issues with many factors
- Clear identification of factors
- Difficulty of establishing causal relations under controlled conditions
- Status of anecdotal evidence
- Difficulty of generalising results
- Any other relevant material.

Marks	AO2
12 -15	Evaluation is relevant, clearly structured and thorough. There is evidence of coherent elaboration in the material presented. Depth and range of evaluation is displayed though not necessarily in equal measure.
8 - 11	Evaluation is relevant, structured and shows some coherence in the material presented. Depth or range of evaluation is displayed.
4 - 7	Evaluation shows some relevance but is basic and limited in detail.
1 - 3	Some very limited, relevant evaluation is present.
0	No relevant evaluation.

Q.12 Describe and evaluate the different aetiologies of schizophrenia.**[25]**Credit **could** be given for:

- Physiological or biological explanations (e.g. genetic, neurotransmitter, structural variations in brain)
- Psychological explanations (intrapersonal regression, interpersonal withdrawal)
- Social explanations (e.g. double-bind, expressed emotion, family, culture)
- Any other relevant material.

Marks	AO1
8 - 10	Knowledge and understanding of evidence is accurate and well detailed. Depth and range of knowledge are displayed though not necessarily in equal measure. Language (including grammar, punctuation and spelling) is relevant, well-structured and accurate.
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1 - 3	Knowledge and understanding is superficial and/or muddled. Language (including grammar, punctuation and spelling) has errors.
0	No relevant knowledge or understanding displayed.

Credit **could** be given for:

- Evidence relating to specific explanations
- Use of further evidence to support or contradict explanations
- Diathesis-stress theory
- Historical and cultural evaluative issues
- Any other relevant material.

Marks	AO2
12 -15	Evaluation is relevant, clearly structured and thorough. There is evidence of coherent elaboration in the material presented. Depth and range of evaluation is displayed though not necessarily in equal measure.
8 - 11	Evaluation is relevant, structured and shows some coherence in the material presented. Depth or range of evaluation is displayed.
4 - 7	Evaluation shows some relevance but is basic and limited in detail.
1 - 3	Some very limited, relevant evaluation is present.
0	No relevant evaluation.



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