

A-level PSYCHOLOGY 7182/3

Paper 3 Issues and options in psychology

Mark scheme

June 2019

Version: 1.0 Final



Mark schemes are prepared by the Lead Assessment Writer and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all associates participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the students' responses to questions and that every associate understands and applies it in the same correct way. As preparation for standardisation each associate analyses a number of students' scripts. Alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, associates encounter unusual answers which have not been raised they are required to refer these to the Lead Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of students' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

Further copies of this mark scheme are available from aga.org.uk

Level of response marking instructions

Level of response mark schemes are broken down into levels, each of which has a descriptor. The descriptor for the level shows the average performance for the level. There are marks in each level.

Before you apply the mark scheme to a student's answer read through the answer and annotate it (as instructed) to show the qualities that are being looked for. You can then apply the mark scheme.

Step 1 Determine a level

Start at the lowest level of the mark scheme and use it as a ladder to see whether the answer meets the descriptor for that level. The descriptor for the level indicates the different qualities that might be seen in the student's answer for that level. If it meets the lowest level then go to the next one and decide if it meets this level, and so on, until you have a match between the level descriptor and the answer. With practice and familiarity you will find that for better answers you will be able to quickly skip through the lower levels of the mark scheme.

When assigning a level you should look at the overall quality of the answer and not look to pick holes in small and specific parts of the answer where the student has not performed quite as well as the rest. If the answer covers different aspects of different levels of the mark scheme you should use a best fit approach for defining the level and then use the variability of the response to help decide the mark within the level, ie if the response is predominantly level 3 with a small amount of level 4 material it would be placed in level 3 but be awarded a mark near the top of the level because of the level 4 content.

Step 2 Determine a mark

Once you have assigned a level you need to decide on the mark. The descriptors on how to allocate marks can help with this. The exemplar materials used during standardisation will help. Answers in the standardising materials will correspond with the different levels of the mark scheme. These answers will have been awarded a mark by the Lead Examiner. You can compare the student's answer with the standardised examples to determine if it is the same standard, better or worse than the example. You can then use this to allocate a mark for the answer based on the Lead Examiner's mark on the example.

You may well need to read back through the answer as you apply the mark scheme to clarify points and assure yourself that the level and the mark are appropriate.

Indicative content in the mark scheme is provided as a guide for examiners. It is not intended to be exhaustive and you must credit other valid points. Students do not have to cover all of the points mentioned in the indicative content to reach the highest level of the mark scheme.

An answer which contains nothing of relevance to the question must be awarded no marks.

Key to Annotations

Annotation	Meaning/Use
,	Unclear
AE	Attempts evaluation
APP	Application
BOD	Benefit of the doubt
X	Cross/Incorrect
EVAL	Evaluation
H LINE	Horizontal Line
IRRL	Irrelevant
KU	Knowledge and Understanding
NAQ	Not answered the question
REP	Repeat
SEEN	Reviewed but no marks awarded
Tick	Correct point
Tick Plus	Development of point
Dis	DIS
DNF	Does not follow
ELAB	Elaboration
GP	Good point
JUST	level or point just awarded
LF	Loses focus
REL?	Relevance
RQ	Repeats Question
VAGU	Indicates that the point made is vague
VL	Very limited
WEAK	Indicates that the point made is weak
On Page comment	On Page Comment
Off Page comment	Off Page comment
Highlight	Highlight

Section A

Issues and debates in Psychology

0 1 Explain what psychologists mean by socially sensitive research.

[2 marks]

Marks for this question: AO1 = 2

2 marks for a clear, coherent explanation with some elaboration

1 mark for a limited/muddled explanation which could apply to any research

Possible content:

- where the topic area and/or group studied can have implications for society/certain groups in society
- potentially leading to a change in, or justification for, the way these groups are treated/perceived

Can credit the above points embedded in an example.

Can credit positive implications as well as negative.

0 2 Referring to the text above, explain what is meant by a paradigm shift.

[4 marks]

Marks for this question: AO2 = 4

Level	Marks	Description
2	3–4	Explanation of a paradigm shift is clear and accurate. Application to the text is appropriate. The answer is generally coherent with effective use of terminology.
1	1–2	Explanation of a paradigm shift is limited/partial. Application may be limited. The answer may lack coherence. Use of terminology may be either absent or inappropriate.
	0	No relevant content.

Possible content:

- a paradigm is a set of shared assumptions/beliefs about how behaviour/thought is studied/explained eg a focus on causal explanations of behaviour
- a shift occurs where members of a scientific community change from one established way of explaining/studying a behaviour/thought to a new way, due to new/contradictory evidence eg shifting focus from cause to free will.
- this shift leads to a 'scientific revolution' eg the cognitive revolution in the 1970s and the current emphasis on cognitive neuroscience.

Which **two** of the following are examples of ethnocentrism? Write the **two** correct letters in your answer book.

When a Chinese researcher:

[2 marks]

Marks for this question: AO2 = 2

C expects people from other countries to behave in the same way as people from China.

D thinks that people from China are superior to people from other countries.

Only credit the first two letters given.

0 4

Discuss the nature-nurture debate in psychology.

[16 marks]

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

Level	Marks	Description
4	13–16	Knowledge of the nature-nurture debate is accurate and generally well detailed. Discussion is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	9–12	Knowledge of the nature-nurture debate is evident but there are occasional inaccuracies/omissions. Discussion is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	5–8	Limited knowledge of the nature-nurture debate present. Focus is mainly on description. Any discussion is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–4	Knowledge of the nature-nurture debate is very limited. Discussion is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- debate about the relative importance of heredity and environment in determining behaviour
- nature view assumes heredity is more influential
- nurture view assumes environment and experience is more influential
- nature side of the debate is founded in nativist theory that knowledge/abilities are innate
- nurture side of the debate is founded in empiricist theory that knowledge derives from learning and experience – Locke's view of the mind as a 'tabula rasa' or blank slate on which experiences are to be written
- knowledge of interactionism.

Credit knowledge of the debate embedded in examples

Possible discussion points:

- use of evidence to support/contradict each side of the argument, eg twin evidence, adoption studies, studies of learning
- links with broad approaches and other debates, eg evidence from biological psychology re effects of neurotransmitters on behaviour
- implications of accepting nature or nurture as the primary driver of behaviour
- discussion in the light of the alternative interactionist view
- role of epigenetics influence of experiences of previous generations on our genetic code/DNA
- Plomin's theory about niche-picking
- use of material from various topics to support argument.
- credit discussion of treatments only where clearly linked to causes/origins of behaviour

Section B

Relationships

Outline and briefly discuss the relationship between sexual selection and human reproductive behaviour.

[8 marks]

Marks for this question: AO1 = 3 and AO3 = 5

Level	Marks	Description
4	7–8	Outline of the relationship between sexual selection and human reproductive behaviour is accurate with some detail. Discussion is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	5–6	Outline of the relationship between sexual selection and human reproductive behaviour is evident but there are occasional inaccuracies/omissions. Discussion is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	3–4	Limited outline of the relationship between sexual selection and human reproductive behaviour is present. Focus is mainly on description. Any discussion is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–2	Outline of the relationship between sexual selection and human reproductive behaviour is very limited. Discussion is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- traits that increase reproductive success, eg strength, height, aggression, wide hips etc confer an evolutionary advantage
- individuals with these traits are more likely to survive and pass on the genes responsible
- inter-sexual selection where traits increase 'attractiveness' and/or induce members of the opposite sex to mate with them e.g. sexual selection via female mate choice eg males show good genes/resources, females show youth/fertility
- intra-sexual selection where traits allow an individual to compete with members of the same sex for access to mating opportunities e.g. male competition
- anisogamy differences in male/female sex cells result in different strategies for reproductive success
- human reproductive strategies male courtship rituals, mate guarding, sneak copulation; female sexy sons hypothesis (Fisher), preference for long courtship.

Possible discussion points:

- sound scientific basis founded on evolutionary theory
- problems with evolutionary explanations falsifiability, pseudoscientific
- consistent with anisogamy differences in male and female sex cells; women must use their gametes wisely; men have many gametes so can be less choosy
- supporting evidence, eg Clark and Hatfield (1989) female choosiness; Pawlowski & Dunbar older women disguise age to appear fertile (1999)
- not as relevant to today's society influence of changes in social attitudes and expectations, eg women now less dependent than previous generations so male resources are less important
- not consistent with male preference for 'the older woman'
- more difficult to apply to non-heterosexual relationships.

Describe and evaluate the social exchange theory of romantic relationships.

[16 marks]

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

Level	Marks	Description
4	13–16	Knowledge of social exchange theory of romantic relationships is accurate and generally well detailed. Evaluation is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	9–12	Knowledge of social exchange theory of romantic relationships is evident but there are occasional inaccuracies/omissions. Evaluation is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	5–8	Limited knowledge of social exchange theory of romantic relationships is present. Focus is mainly on description. Any evaluation is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–4	Knowledge of social exchange theory of romantic relationships is very limited. Evaluation is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- an economic theory of romantic relationships
- considers how partners exchange rewards and costs
- assumes that those who offer rewards are attractive and those who are perceived to involve great cost are less attractive
- Thibaut and Kelley's 4-stage model sampling, bargaining, commitment, institutionalisation
- uses comparison level and comparison level alternatives
- predicts that relationships that benefit both parties will succeed whereas relationships that are imbalanced will fail.

Possible evaluation points:

- use of evidence to support or contradict the theory
- assumes people make rational and calculated decisions about romantic relationships
- can account for individual differences in attraction as different people will perceive certain rewards and costs differently
- explains maintenance better than initial attraction as time goes on costs become more evident
- oversimplifies complex human romantic relationships does not account for selfless behaviour
- comparison with Rusbult's elaboration of the theory

Section B

Gender

0 7

Outline and briefly discuss Freud's theory of the Oedipus complex as an explanation for gender development in boys.

[8 marks]

Marks for this question: AO1 = 3 and AO3 = 5

Level	Marks	Description
4	7–8	Outline of Freud's theory of the Oedipus complex as an explanation for gender development in boys is accurate with some detail. Discussion is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	5–6	Outline of Freud's theory of the Oedipus complex as an explanation for gender development in boys is evident but there are occasional inaccuracies/omissions. Discussion is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	3–4	Limited outline of Freud's theory of the Oedipus complex as an explanation for gender development in boys is present. Focus is mainly on description. Any discussion is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–2	Outline of Freud's theory of the Oedipus complex as an explanation for gender development in boys is very limited. Discussion is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- unconscious process which occurs during the phallic stage of development (approximately 4–5 years)
- young boy has feelings for mother, experiences castration anxiety, fears castration by father, the aggressor
- boy resolves the internal conflict through identification with aggressor, the father
- as a consequence of conflict resolution the boy internalises the male role and adopts male-related behaviours and attitudes of his father.

Possible discussion points:

- use of evidence to support/contradict Freud's Oedipus complex, eg evidence of 'typical' gender development in boys from 'gender atypical' households
- status of Freud's case study evidence, eg interpretation of Little Hans
- lack of testability Oedipus complex is unconscious therefore not falsifiable
- inability to explain continuing gender development beyond age 4/5 years
- contrast with other explanations eg (cognitive, biological, the influence of social factors (SLT).

Describe and evaluate Kohlberg's explanation for gender development.

[16 marks]

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

Level	Marks	Description
4	13–16	Knowledge of Kohlberg's explanation for gender development is accurate and generally well detailed. Evaluation is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	9–12	Knowledge of Kohlberg's explanation for gender development is evident but there are occasional inaccuracies/omissions. Evaluation is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	5–8	Limited knowledge of Kohlberg's explanation for gender development is present. Focus is mainly on description. Any evaluation is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–4	Knowledge of Kohlberg's explanation for gender development is very limited. Evaluation is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- cognitive theory of gender development
- stages: identity/labelling (awareness of own gender), stability (understanding of (own) gender as fixed over time), constancy/consistency (understanding that gender is unchanged despite changes in outward appearance or context)
- · approximate ages attached to Kohlberg's stages
- child actively constructs his/her own understanding of gender through experience
- processes that drive transition through the stages, eg maturation, socialisation, lessening egocentrism
- once constancy is achieved child seeks out same sex role models.

Possible evaluation points:

- sensible focus on cognition as opposed to outward behaviour
- use of evidence to support Kohlberg's stages, eg Slaby and Frey (1975)
- support for universality through cross cultural findings
- contradictory evidence, eg findings that same-sex playmate preference occurs before gender identity stage
- theories can describe development of understanding but not explain it
- cannot easily explain why boys show stronger sex-typing than girls
- comparison with other explanations, eg gender schema theory, biological explanations.

Section B

Cognition and development

0 9 Outline and briefly discuss the role of the mirror neuron system in social cognition.

[8 marks]

Marks for this question: AO1 = 3 and AO3 = 5

Level	Marks	Description
4	7–8	Outline of the role of the mirror neuron system in social cognition is accurate with some detail. Discussion is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	5–6	Outline of the role of the mirror neuron system in social cognition is evident but there are occasional inaccuracies/omissions. Discussion is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	3–4	Limited outline of the role of the mirror neuron system in social cognition is present. Focus is mainly on description. Any discussion is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–2	Outline of the role of the mirror neuron system in social cognition is very limited. Discussion is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- believed to be responsible for human ability to share understanding of intention and emotional experience
- brain cells that are activated when we observe actions carried out by another person
- cell activation is the same as if we had carried out the action ourselves
- links with work on social understanding, eg perspective taking, theory of mind, and empathy
- deficits in social cognition may be linked to problems in mirror neuron function
- investigated using scanning techniques certain areas thought to be rich in mirror neurons include pars opercularis and Brodmann's area of the frontal lobe.

Possible discussion points:

- mirror neuron system could be fundamental to the development of human society
- might explain social understanding, eg perspective taking and theory of mind so deficits in social cognition may be linked to problems in mirror neuron function
- existence is controversial individual cells can only be identified by their function
- scanning studies which do not locate/identify individual cells, just activity in an area/region
- some evidence of impaired mirror neuron activity in cases of autistic spectrum disorder (Hadjikhani 2007, Dapretto 2006)
- critics they may just be a by-product of social interaction

• links with broader issues, eg determinism.

Credit other relevant material.

1 0 Describe and evaluate Piaget's research in relation to the pre-operational stage of intellectual development.

[16 marks]

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

Level	Marks	Description
4	13–16	Knowledge of Piaget's research in relation to the pre-operational stage of intellectual development is accurate and generally well detailed. Evaluation is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	9–12	Knowledge of Piaget's research in relation to the pre-operational stage of intellectual development is evident but there are occasional inaccuracies/omissions. Evaluation is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	5–8	Limited knowledge of Piaget's research in relation to the pre-operational stage of intellectual development is present. Focus is mainly on description. Any evaluation is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–4	Knowledge of Piaget's research in relation to the pre-operational stage of intellectual development is very limited. Evaluation is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- the second stage of Piaget's theory of intellectual development that occurs around the ages of 2–7 years
- subdivided into the pre-conceptual (2–4) and intuitive stages (4–7)
- at this stage, the child's understanding is governed by outward appearances
- child cannot perform logical mental operations, eg reversibility tasks
- child has difficulty with centration, seriation, conservation, class inclusion, and is egocentric
- knowledge of Piagetian experiments relevant to the pre-operational stage, eg the 3 mountains task and the beaker conservation task.

Possible evaluation points:

- use of evidence to support/contradict the features of the pre-operational stage
- Piaget's pre-operational tasks focused on demonstrating lack of ability, which might not be the same as lack of understanding
- Piaget's theory of pre-operational stage is underpinned by his studies which had methodological flaws, eg same question asked twice in conservation tasks
- comparison of Piaget's pre-operational findings with alternative findings, eg McGarrigle and Donaldson (1974), Hughes (1975)
- implications of Piaget's findings re pre-operational thought for education, eg if young children cannot decentre how valuable is role-play
- pre-operational stage may not be a rigid stage but part of a more gradual incremental process
- pre-operational thought is tied to the development of language through his notion of general symbolic function.

Section C

Schizophrenia

1 1 Name and briefly outline **one** negative symptom of schizophrenia.

[2 marks]

Marks for this question: AO1 = 2

Award 1 mark for naming one relevant symptom from the following:

- avolition/apathy
- speech poverty/alogia
- flat affect/emotional blunting
- · poor/absent social functioning
- · anhedonia.

Plus

1 mark for a brief outline of the symptom, eg avolition is where the person lacks the will to act.

Credit other relevant negative symptoms.

1 2 Explain why a Mann-Whitney test is an appropriate choice of statistical test in this situation and a Spearman's test is not.

[2 marks]

Marks for this question: AO2 = 2

Award 1 mark for each of the following:

- this study is about differences between two conditions/groups so the Mann-Whitney is appropriate
- it is not about correlation/relationship between two variables so Spearman's is not appropriate.

No credit for 'association'.

Explain **one** reason why there might be a problem of bias and generalisation in this study. How could the researchers modify their study to deal with this problem?

[4 marks]

Marks for this question: AO2 = 2 and AO3 = 2

Award 1 mark for each of the following points:

- identifying source of bias EITHER people volunteer so their behaviour might be atypical/unrepresentative OR they all attend self-help group so their behaviour may be atypical/unrepresentative eg volunteers may be better communicators, more verbal
- therefore, it is not appropriate to generalise their language ability to all people with schizophrenia (must be some application here)
- use a different sampling method, such as random or systematic OR a sample of people with schizophrenia who do not go to a self-help group.
- this should enable a less biased/more varied/more representative sample OR this would allow the results to be generalised more widely.

Credit other relevant sources of bias.

1 4 Discuss the use of an interactionist approach in explaining and treating schizophrenia.

[16 marks]

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

Level	Marks	Description
4	13–16	Knowledge of the interactionist approach to explaining and treating schizophrenia is accurate and generally well detailed. Discussion is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	9–12	Knowledge of the interactionist approach to explaining and treating schizophrenia is evident but there are occasional inaccuracies/omissions. Discussion is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	5–8	Limited knowledge of the interactionist approach to explaining/treating schizophrenia is present. Focus is mainly on description. Any discussion is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions. OR either explaining or treating at Level 3/4.
1	1–4	Knowledge of the interactionist approach to explaining/treating schizophrenia is very limited. Discussion is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used. OR either explaining or treating at Level 2.
	0	No relevant content.

Possible content:

- considers the combined effects of biological, psychological and social factors on the development of schizophrenia
- diathesis-stress model combines effects of internal vulnerability and external stress trigger
- vulnerability (diathesis) originally thought to be genetic, now includes vulnerabilities due to childhood trauma which might have affected brain development
- stress trigger would be any negative psychological experience, eg breakdown of relationship, academic pressure etc
- an interactionist treatment approach would include combining anti-psychotic medication with psychological therapy.

Possible discussion points:

- revised understanding of diathesis move from focus purely on single gene effect to polygenic effect
- use of evidence that vulnerability may be neurodevelopmental (Read 2001), due to birth trauma (Cannon 2002), early psychological trauma (Ingram and Luxton 2005)
- revised understanding of stress trigger now includes any risk trigger, eg substance abuse
- implications for treatment relative effectiveness of single treatments versus multidisciplinary approach
- use of evidence to support effectiveness of combined treatments, eg Tarrier 2004
- links to broader theories/explanations, eg behaviourism, the biological approach, psychodynamic theory
- links to broader debates, eg reductionism v holism.

Section C

Eating behaviour

1 5 Identify and briefly outline **one** psychological explanation for anorexia nervosa.

[2 marks]

Marks for this question: AO1 = 2

Award **1 mark** for naming **one** relevant explanation from the following:

- family systems theory (or any single element, eg autonomy, control, enmeshment)
- social learning theory (or any single element, eg modelling, reinforcement)
- cognitive theory (or any single element, eg distortions, irrational beliefs).

Plus

1 mark for a brief outline of the explanation/individual element, eg family systems theory is where anorexia is attributed to the behaviour of the family, typically enmeshed (over-involved) behaviour; people sometimes develop anorexia as a quest for autonomy – the only aspect of life they can control is what they eat.

1 6 Explain why a Mann-Whitney test is an appropriate choice of statistical test in this situation and a Spearman's test is not.

[2 marks]

Marks for this question: AO2 = 2

Award 1 mark for each of the following:

- this study is about differences between two conditions/groups so the Mann-Whitney is appropriate
- it is not about correlation/relationship between two variables so Spearman's is not appropriate.

No credit for 'association'.

Explain **one** reason why there might be a problem of bias and generalisation in this study. How could the researchers modify their study to deal with this problem?

[4 marks]

Marks for this question: AO2 = 2 and AO3 = 2

Award 1 mark for each of the following points:

- identifying source of bias EITHER people volunteer so their behaviour might be atypical/unrepresentative OR they all attend self-help group so their behaviour may be atypical/unrepresentative eg volunteers may be more aware of their body image
- therefore, it is not appropriate to generalise their body image rating to all people with eating disorders (must be some application here)
- use a different sampling method, such as random or systematic OR a sample of people with eating disorders who do not go to a self-help group.
- this should enable a less biased/more varied/more representative sample OR this would allow the results to be generalised more widely.

Credit other relevant sources of bias.

1 8 Describe and evaluate genetic **and** neural explanations for obesity.

[16 marks]

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

Level	Marks	Description
4	13–16	Knowledge of genetic and neural explanations for obesity is accurate and generally well detailed. Evaluation is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	9–12	Knowledge of genetic and neural explanations for obesity is evident but there are occasional inaccuracies/omissions. Evaluation is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	5–8	Limited knowledge of genetic and neural explanations for obesity is present. Focus is mainly on description. Any evaluation is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions. EITHER genetic or neural at Level 3/4.
1	1–4	Knowledge of genetic/neural explanations for obesity is very limited. Evaluation is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used. EITHER genetic or neural at Level 2.
	0	No relevant content.

Possible content:

- genetic theory runs in families, inherited, governed by DNA, candidate genes eg DRD2, FTO, 'thrifty gene'
- studies compare body mass index (BMI) between family members
- assess rates of concordance for BMI, eg between pairs of MZ twins and pairs of DZ twins or adopted children and biological/adoptive parents
- neural explanation malfunctioning of hypothalamus, specifically the ventromedial hypothalamus, so appetite is unregulated
- VMH malfunction is affected by low levels of leptin
- serotonin and dopamine low levels of dopamine activity linked to obesity (Wang 2001); low serotonin leading to disinhibited eating.

Possible evaluation points:

- use of evidence to support/contradict genetic and neural explanations, eg Nan 2012 concordance rates; Ohia 2013 serotonin and obesity in mice
- complication of co-morbidity with other conditions, eg depression
- comparison with psychological explanations
- links with evolutionary theory storing fat for energy when food is freely available would confer survival advantage – dysfunctional over-eating is an evolutionary hangover – could explain increase in obesity
- links with broader debates, eg reductionism v holism and determinism
- implications for attitudes towards obesity and for treatment.

Section C

Stress

1 9 Name **one** type of drug used to treat stress and briefly outline how it functions.

[2 marks]

Marks for this question: AO1 = 2

Award **1 mark** for naming a type of drug as follows:

- benzodiazepines
- beta blockers.

Credit also hypnotics and anxiolytics (sub-types of benzodiazepines).

Plus

1 mark for a brief outline of the function of the named type: benzodiazepines bind to GABA receptors increasing the effects of GABA to decrease anxiety; beta blockers lower adrenaline/noradrenaline/epinephrine/norepinephrine action to reduce physical symptoms of anxiety.

2 0 Explain why a Mann-Whitney test is an appropriate choice of statistical test in this situation and a Spearman's test is not.

[2 marks]

Marks for this question: AO2 = 2

Award 1 mark for each of the following:

- this study is about differences between two conditions/groups so the Mann-Whitney is appropriate
- it is not about correlation/relationship between two variables so Spearman's is not appropriate.

No credit for 'association'.

Explain **one** reason why there might be a problem of bias and generalisation in this study. How could the researchers modify their study to deal with this problem?

[4 marks]

Marks for this question: AO2 = 2 and AO3 = 2

Award 1 mark for each of the following points:

- identifying source of bias EITHER people volunteer so their behaviour might be atypical/unrepresentative OR they all attend self-help group so their behaviour may be atypical/unrepresentative eg volunteers may be more stressed
- therefore, it is not appropriate to generalise their stress rating to all people with stress (must be some application here)
- use a different sampling method, such as random or systematic OR a sample of people with stress who do not go to a self-help group.
- this should enable a less biased/more varied/more representative sample OR this would allow the results to be generalised more widely.

Credit other relevant sources of bias.

2 Discuss the role of personality type **and** hardiness in stress.

[16 marks]

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

Level	Marks	Description
4	13–16	Knowledge of the role of personality type and hardiness in stress is accurate and generally well detailed. Discussion is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	9–12	Knowledge of the role of personality type and hardiness in stress is evident but there are occasional inaccuracies/omissions. Discussion is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	5–8	Limited knowledge of the role of personality type and hardiness in stress is present. Focus is mainly on description. Any discussion is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions. OR one individual difference only at Level 3/4.
1	1–4	Knowledge of the role of personality type and hardiness in stress is very limited. Discussion is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used. OR one individual difference only at Level 2.
	0	No relevant content.

Possible content:

Personality type

- Friedman and Rosenman found personality type was related to negative consequences of stress, especially CHD
- type A experience more negative response to stress, ie higher rates of CHD
- type A traits: time urgency, competitiveness, aggression, hostility
- type B less likely to suffer from stress; Type C easily stressed and cancer prone; Type D routine bound, anxious therefore increased risk of cardiac illness.

Hardiness

- hardy people less likely to suffer from stress
- three aspects of hardiness identified by Kobasa:
- commitment to life, family society
- challenge see change as opportunity not threat
- control feel autonomous and in control.

Possible discussion points:

- use of evidence to support or contradict influence of the individual difference, eg Friedman and Rosenman 1974
- specific type A traits more relevant than overall type, eg Forshaw 2012 hostility is key factor
- role of external factors, eg degree of control over circumstances

- effect is not causal, only correlational
- role of other variables, eg gender differences in effects of hardiness on response to stress
- implications for treatment cannot change personality type but can change behaviour, eg use of hardiness training.

Section D

Aggression

2 3 Explain how two sets of images could be used in this study and why this would be an improvement.

[4 marks]

Marks for this question: AO3 = 4

1 mark for each of the following points:

- the researcher should use a different set of images for the before and after test
- the two sets would need to be matched for negative content, eg same level of violence/graphic imagery OR counterbalance the two sets of images, eg half the participants see A first followed by B, the other half see B first followed by A
- this would reduce effects of demand characteristics/the problem of order effects
- participants might guess the purpose of the study and therefore respond according to expectations/participants might be affected by boredom/practice

Credit also answers explaining a different improvement.

2 4 How many of the participants had a score < the median in the before condition? Explain your answer.

[4 marks]

Marks for this question: AO2 = 4

1 mark: 7

1 mark: lower/less than

1 mark: we are told that all 15 scores are different

4th mark for any one of the following;

- this means that, when they are ordered from lowest to highest, the median would be the 8th score/middle/centre score
- the above represented pictorially
- stating 7 would be below and 7 would be above the middle value of 23
- a valid formula-based answer

2 5 Describe what is meant by a fixed action pattern. Refer to the study above in your answer.

[8 marks]

Marks for this question: AO1 = 4 and AO2 = 4

Level	Marks	Description
4	7–8	Knowledge of fixed action patterns is accurate with some detail. Application is thorough and effective. Minor detail and/or expansion is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	5–6	Knowledge of fixed action patterns is evident but there are occasional inaccuracies/omissions. Application is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	3–4	Limited knowledge of fixed action patterns is present. Any application is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–2	Knowledge of fixed action patterns is very limited. Application is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- a fixed action pattern (FAP) is an adaptive sequence/repertoire of stylised/stereotyped/ritual behaviours
- universal within a species all members of a species show the same pattern of behaviour
- the ritual is 'ballistic', ie cannot be stopped once initiated
- Lorenz's hydraulic model
- ritual is situation specific
- FAPs occur when innate neural circuits (innate releasing mechanisms or IRMs) respond to specific environmental stimuli (sign stimuli)
- · act to release or trigger the behaviour

Possible application points:

- the fish displayed a ritualised 'puffing' behaviour (FAP) to make themselves more threatening
- they both reacted the same way, showing universality
- their innate releasing mechanism (IRM) was elicited by presentation of a specific stimulus the other male fish that was brightly coloured
- the same response occurred using other materials that resembled the original stimulus, ie brightly coloured card.

Credit other relevant material/application.

2 6 Outline and evaluate the dispositional explanation for institutional aggression in prisons.

[8 marks]

Marks for this question: AO1 = 3 and AO3 = 5

Level	Marks	Description
4	7–8	Knowledge of the dispositional explanation for institutional aggression in prisons is accurate with some detail. Evaluation is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	5–6	Knowledge of the dispositional explanation for institutional aggression in prisons is evident but there are occasional inaccuracies/omissions. Evaluation is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	3–4	Limited knowledge of the dispositional explanation for institutional aggression in prison is present. Focus is mainly on description. Any evaluation is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–2	Knowledge of the dispositional explanation for institutional aggression in prisons is very limited. Evaluation is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- dispositional explanation argues that aggression is internal due to individual characteristics of the prisoners
- idea of 'importation', ie that the aggression is imported into the institution as part of the prisoners' make-up
- people who are aggressive, bullying, angry etc outside prison behave in the same way as inmates
- mediating effects of other imported variables, eg race, level of education, gang membership.

Possible evaluation points:

- use of evidence to support the dispositional explanations, eg DeLisi 2011
- contrast with the situational explanation that aggression is influenced by the prison culture
- difficulty of finding any practical application of this explanation
- debate about whether prison cultures themselves are imported, Irwin & Cressey 1962
- notion of brutalisation that non-aggressive prisoners become hardened by the prison system
- implications debate about sources of prison aggression will affect prison policy.

Section D

Forensic psychology

2 7 Explain how two sets of images could be used in this study and why this would be an improvement.

[4 marks]

Marks for this question: AO3 = 4

1 mark for each of the following points:

- the researcher should use a different set of images for the before and after test
- the two sets would need to be matched for negative content, eg same level of violence/graphic imagery OR counterbalance the two sets of images, eg half the participants see A first followed by B, the other half see B first followed by A
- this would reduce effects of demand characteristics/the problem of order effects
- participants might guess the purpose of the study and therefore respond according to expectations/ participants might be affected by boredom/practice

Credit also answers explaining a different improvement.

2 8 How many of the participants had a score < the median in the before condition? Explain your answer.

[4 marks]

Marks for this question: AO2 = 4

1 mark: 7

1 mark: lower/less than

1 mark: we are told that all 15 scores are different

4th mark for any one of the following;

- this means that, when they are ordered from lowest to highest, the median would be the 8th score/middle/centre score
- · the above represented pictorially
- stating 7 would be below and 7 would be above the middle value of 23
- a valid formula-based answer

Describe differential association theory in the context of offending. Refer to the study above in your answer.

[8 marks]

Marks for this question: AO1 = 4 and AO2 = 4

Level	Marks	Description
4	7–8	Knowledge of differential association theory in the context of offending is accurate with some detail. Application is thorough and effective. Minor detail and/or expansion is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	5–6	Knowledge of differential association theory in the context of offending is evident but there are occasional inaccuracies/omissions. Application is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	3–4	Limited knowledge of differential association theory in the context of offending is present. Any application is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–2	Knowledge of differential association theory in the context of offending is very limited. Application is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- differential association theory (Sutherland 1939) proposes that offending is learnt through socialisation
- pro-criminal attitudes/behaviours occur through association and relationships with other people (friends, family etc)
- from these people we learn our norms and values, even deviant ones
- offending behaviours/techniques are passed on from one generation to another/from peers
- everyone's associations are different (differential association)
- expectations/attitudes of those around us (family, friends etc) act to reinforce our behaviours (criminal or otherwise) through acceptance/approval etc
- reinforcement also affects offending behaviour if rewards for offending are greater than the rewards for not offending.

Possible application points:

- whole families show deviant behaviour, the adults' behaviour is repeated by sons and grandsons
- crimes were similar possible indication that specific techniques had been passed down
- this suggests that criminal behaviour is accepted as the norm within the family
- the criminal social norm is shown by friends and neighbours who also accept the behaviour
- most are not concerned, or actually approve of the offending, reinforcing the way the families behave.

Credit other relevant material/application.

3 0 Outline and evaluate official statistics and/or victim surveys as ways of measuring crime.

[8 marks]

Marks for this question: AO1 = 3 and AO3 = 5

Level	Marks	Description
4	7–8	Knowledge of official statistics and/or victim surveys as ways of measuring crime is accurate with some detail. Evaluation is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	5–6	Knowledge of official statistics and/or victim surveys as ways of measuring crime is evident but there are occasional inaccuracies/omissions. Evaluation is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	3–4	Limited knowledge of official statistics and/or victim surveys as ways of measuring crime is present. Focus is mainly on description. Any evaluation is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–2	Knowledge of official statistics and/or victim surveys as ways of measuring crime is very limited. Evaluation is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- official statistics compiled by home office/government
- published annually
- · consist of crimes against households, adults, children, businesses and society
- data recorded by the police
- crime survey data (CSEW) for adults 16+ or households
- methods of implementation of crime surveys (eg random selection/telephone/anonymity)

Possible evaluation points:

- enable understanding of trends/patterns over time
- discrepancies between police data and crime survey data the 'dark figure of crime'
- useful for allocation of resources and development of public policy
- problems of reliability in police recording, eg minor crimes not always recorded, effect of targets
- problems of reliability in the crime survey data, eq under-reporting due to poor recall; sampling issues
- implications, eg lack of reliability can have a negative effect on funding, policing strategies etc
- use of evidence to support discussion, eg Farrington and Dowd's study of police recording rules.

Section D

Addiction

3 1 Explain how two sets of images could be used in this study and why this would be an improvement.

[4 marks]

Marks for this question: AO3 = 4

1 mark for each of the following points:

- the researcher should use a different set of images for the before and after test
- the two sets would need to be matched for negative content, eg same level of violence/graphic imagery OR counterbalance the two sets of images, eg half the participants see A first followed by B, the other half see B first followed by A
- this would reduce effects of demand characteristics/the problem of order effects
- participants might guess the purpose of the study and therefore respond according to expectations/ participants might be affected by boredom/practice

Credit also answers explaining a different improvement

How many of the participants had a score < the median in the before condition? Explain your answer.

[4 marks]

Marks for this question: AO2 = 4

1 mark: 7

1 mark: lower/less than

1 mark: we are told that all 15 scores are different

4th mark for any one of the following;

- this means that, when they are ordered from lowest to highest, the median would be the 8th score/middle/centre score
- the above represented pictorially
- stating 7 would be below and 7 would be above the middle value of 23
- a valid formula-based answer

3 3 Describe learning theory as applied to gambling. Refer to the study above in your answer.

[8 marks]

Marks for this question: AO1 = 4 and AO2 = 4

Level	Marks	Description
4	7–8	Knowledge of learning theory as applied to gambling is accurate with some detail. Application is thorough and effective. Minor detail and/or expansion is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	5–6	Knowledge of learning theory as applied to gambling is evident but there are occasional inaccuracies/omissions. Application is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	3–4	Limited knowledge of learning theory as applied to gambling is present. Any application is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–2	Knowledge of learning theory as applied to gambling is very limited. Application is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- learning theory suggests that gambling is learnt through conditioning (classical and operant)
- operant conditioning occurs where the gambling behaviour is reinforced
- positive reinforcement occurs when gambling has positive consequences (win, excitement)
- partial reinforcement is when wins occur unpredictably at either variable intervals or on a variable ratio
- · partial or variable schedules tend to result in more persistent gambling behaviour
- the behaviour does not extinguish even when wins stop
- social learning theory concepts as applied to gambling

Possible application points:

- the researchers are manipulating the schedules of reinforcement
- machine 'wins' act as positive reinforcement
- payout after every 2 minutes is an example of a fixed interval schedule
- payout on average after every 10th bet is an example of a variable ratio schedule more reinforcing and leads to stronger and more persistent betting behaviour
- the machines where people continue to bet even after wins stopped probably have a variable schedule, so the behaviour is hard to extinguish.

Credit other relevant material/application.

3 4 Outline and evaluate personality as a risk factor in the development of addiction.

[8 marks]

Marks for this question: AO1 = 3 and AO3 = 5

Level	Marks	Description
4	7–8	Knowledge of personality as a risk factor in the development of addiction is accurate with some detail. Evaluation is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	5–6	Knowledge of personality as a risk factor in the development of addiction is evident but there are occasional inaccuracies/omissions. Evaluation is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	3–4	Limited knowledge of personality as a risk factor in the development of addiction is present. Focus is mainly on description. Any evaluation is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–2	Knowledge of personality as a risk factor in the development of addiction is very limited. Evaluation is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- proposed addictive personality suggesting a correlation between certain traits and addiction
- anti-social personality disorder has been linked to addiction
- traits typically seen in anti-social personality disorder are neuroticism, psychoticism (Eysenck)
- Cloninger's 3-dimensions of addictive behaviour: high novelty-seeking, inhibited harm avoidance and high reward dependence
- key trait may be impulsivity, leading to risk-taking, sensation-seeking and a chaotic lifestyle.

Possible evaluation points:

- possibility that personality-based explanations have a genetic basis
- findings are only correlational do not show cause and effect
- any effect of personality may be just a pre-disposition
- some personality traits decrease the risk of addiction (eg resilience)
- relative influences of other risk factors, eg peers, stress etc
- deterministic approach and the implications for treatment not possible to change personality.