A-level
PSYCHOLOGY
7182/3R

Paper 3   Issues and options in psychology

Mark scheme

November 2020

Version: 1.0 Final Mark Scheme

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 aqa.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.

Section A

Issues and debates in psychology

| 0 | 1 | Outline what is meant by cultural relativism.

[2 marks]

Marks for this question: AO1 = 2

2 marks for a clear and coherent answer with some elaboration.

1 mark for a limited/muddled answer.

Content
The idea that a behaviour can only be properly understood/only has meaning/only makes sense in the context of the norms and values of the society or culture in which it occurs.

Max 1 mark for reference to norms/normal behaviours/values as specific to a culture **or** for noting that it is inappropriate to study only one culture then make generalisations.

Credit alternative valid outlines.

| 0 | 2 | Suggest **two** ways in which researchers might reduce cultural bias in their research.

[2 marks]

Marks for this question: AO3 = 2

Award **1 mark** for **each** relevant way up to a maximum of 2 marks.

Possible ways:
- do not attempt to extrapolate findings/theories to cultures that are not represented in the research sample
- use researchers who are native to/familiar with/immersed in the culture being investigated
- carry out cross-cultural research rather than research with a sole culture
- do not assume universal norms/standards across different cultures
- be sensitive to cultural norms/standards when designing research/when reporting findings
- study single culture to understand that culture (emic approach)
- taking a reflexive approach ie constantly reflecting on own biases when carrying out research

Credit other relevant suggestions.

0 3 Jonny is 25 years old. He is a very anxious person. Colleagues tease him at work because he chews his pen all the time and spends hours tidying his desk. He finds it difficult to make friends and has never had a girlfriend.

Use your knowledge of psychic determinism to explain Jonny's behaviour.

[4 marks]

Marks for this question: AO2 = 4

Level	Marks	Description
2	3–4	Application is clear, appropriate and explicit showing sound understanding of psychic determinism. There is appropriate use of specialist terminology.
1	1–2	Application is limited/muddled showing limited understanding of psychic determinism. The answer lacks detail. Use of specialist terminology is either absent or inappropriate.
	0	No relevant content.

Possible content:
- psychic determinism suggests that adult behaviour, eg anxiety, pen-chewing, tidying, relationship problems, is determined by childhood/early experiences and by innate, unconscious drives/motives ie Jonny has no free will
- experiences that occurred during stages of psychosexual development have unconsciously influenced Jonny's adult behaviour/experience – his adult behaviour/experience has been caused by early experiences (this would be hard determinism)
- Jonny is unaware of these early experiences as his memory has been repressed, but they manifest themselves in symbolic outward behaviours. Jonny is a slave to his unconscious
- specific links between behaviours in the stem and psychosexual conflicts, eg pen-chewing related to oral fixation; tidying to anal retentiveness; relationship problems to difficulties arising in the genital stage.

Credit other relevant material.

0 4 'Psychologists sometimes adopt a reductionist approach to their investigations when they want their research to be objective and empirical.'

Discuss reductionism in psychological research. Refer to the statement above in your answer.

[16 marks]

Marks for this question: AO1 = 6, AO2 = 4, AO3 = 6

Level	Marks	Description
4	13–16	Knowledge of reductionism is accurate and generally well detailed. Application to the statement is effective. 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 reductionism is evident but there are occasional inaccuracies/omissions. Application/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 reductionism is present. Focus is mainly on description. Any discussion/application 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 reductionism is very limited. Application/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:
- reductionism – explaining/studying complex and meaningful behaviour/experience by breaking it down into smaller component parts/constituents/elements
- levels of explanation – basic unit level to more complex holistic level
- types of reductionism: biological – explaining behaviour at the level of genes, brain chemicals etc; environmental – explaining behaviour at the level of stimulus-response units; experimental reductionism; machine reductionism – explaining behaviour in terms of mechanistic models
- objectivity, use of empirical methods – basic scientific principle that evidence should be observable and unaffected by opinion/subjective interpretation.

Possible application:
Links between reductionism and objectivity/empirical methods:
- explaining/understanding behaviour at the basic component level of biological units is objective and empirical, eg measurement of levels of neurotransmitters like serotonin and dopamine

- explaining/understanding behaviour at the basic component level of stimulus-response links (eg classical/operant conditioning) is objective, empirical as it involves manipulation of stimuli and observation/recording of responses
- explaining information processing at the level of processing units each with separate features (eg multistore model) is objective – involves empirical manipulation/observation of variables in experiments.

Possible discussion points:
- the reductionist approach fits well with psychology's drive for scientific status and the consequent focus on objectivity and empiricism
- reductionism leads to clearly defined variables which can be operationalised and observed objectively which allows for the inference of causal relationships – establishing a cause and effect relationship
- reductionism leads to loss of meaning – components do not add up to reflect whole experience
- contrasts with holism – studying and valuing human experience as a whole, considering meaning, feeling, personal experience/context. Only by studying the whole can we really understand human experience
- some behaviours, particularly social behaviours can only really be investigated in the holistic context in which they occur
- usefulness of reductionist treatments, eg use of drugs – effectiveness can be empirically tested
- contrast with the types of investigation preferred by humanistic psychologists such as Maslow and Rogers – use of case studies, diaries, interviews – to yield richer, more detailed information
- difficulty of finding a balance between objective, empirical method and the striving for meaningful information
- comparison of approaches in terms of reductionism/objectivity/empirical approach.

Credit other relevant material.

Section B

Relationships

0 5   Which **one** of the following best describes social exchange theory? Write the correct letter in your answer book.

[1 mark]

Marks for this question: AO1 = 1

C A theory that proposes individuals focus on getting out more than they put in.

0 6   Suggest a more appropriate statistical test of difference for the student to use with this data. Explain **two** reasons for your choice based on the description of the study.

[5 marks]

Marks for this question: AO3 = 5

1 mark for naming an appropriate test: Wilcoxon test (can also credit Sign test or related t-test)

Plus **one** mark for each of the following:

- same women judge both descriptions
- so the study is a repeated/related design (not independent as would be appropriate for an unrelated t-test)
- data are ratings on a scale of liking 1–10, ie the women's subjective opinion
- there is no fixed unit of liking therefore the data are at the ordinal level of measurement/ non-parametric

3rd and 4th bullet for sign test: (can be treated as) nominal/categorical data plus justification - liking scale could be categorised into categories eg 'like', 'dislike'
3rd and 4th bullet for related t-test: can be treated as interval with justification ie test is robust enough to cope with data on a numerical scale

Appropriate reason can be credited even if an incorrect test is named or no test is given.

0 7   The student who carried out the study selected the two descriptions. He decided himself which social backgrounds were similar and which social backgrounds were different.

Explain how the study could be improved by selecting the descriptions another way.

[2 marks]

Marks for this question: AO3 = 2

Award marks as follows:

1 mark for an appropriate suggested modification, eg have an independent person/researcher who does not know the purpose of the study select the descriptions; use a panel of raters who have nothing to do with the study.

1 mark for briefly explaining how this would improve the study: this would remove any chance of researcher bias or investigator bias/would increase validity.

Credit other relevant suggestions.

| 0 | 8 | Discuss the filter theory of attraction. Refer to the likely outcome of the student's study in your answer.

[8 marks]

Marks for this question: AO1 = 3, AO2 = 2, AO3 = 3

Level	Marks	Description
4	7–8	Knowledge of filter theory is accurate with some detail. Application is effective. Discussion is 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 filter theory is evident but there are occasional inaccuracies/omissions. Application/discussion 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 filter theory is present. Focus is mainly on description. Any application/discussion 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 filter theory is very limited. Application/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:
- Kerckhoff and Davis (1962) proposed we use filtering to reduce the field of available to a field of desirables
- when we meet people we engage in three levels of filtering: social demography, similarity in attitude, complementarity:
  - social demography – at the outset we screen out people who are different in terms of age, sex, education etc
  - then we choose people who have similar attitudes to our own
  - in the longer-term, we choose people who complement our own traits.

Possible application:
- social background is an aspect of social demography – the first level of filtering
- according to the filter theory view of social demography, we are more attracted to people from similar backgrounds

- the female participants will give higher ratings for liking to the similar descriptions than the different descriptions.

Possible discussion points:
- use of evidence to support/contradict filter theory, eg Taylor (2010) – people tend to marry someone from their own ethnic group; Kerckhoff and David (1962) – attitude similarity is an important factor in staying together; Gruber-Baldini (1995) – found similarities between spouses
- filter theory is consistent with the matching hypothesis
- cannot establish causality – maybe similarity of partners increases over time
- temporal validity – modern society is highly mobile and diverse; technology reduces/eliminates physical constraints to the establishment of relationships, eg with internet relationships.

Credit other relevant material.

| 0 | 9 | Outline Rusbult's model of romantic relationships. Explain **one or more** strength(s) of Rusbult's model. |

[8 marks]

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

Level	Marks	Description
4	7–8	Outline of Rusbult's model is accurate with some detail. Explanation of strength(s) 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 Rusbult's model is evident but there are occasional inaccuracies/omissions. Explanation of strength(s) 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 Rusbult's model is present. Any explanation of strength(s) 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 Rusbult's model is very limited. Explanation 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:
- Rusbult developed/extended SET by proposing investment model
- Rusbult saw commitment is key factor in sustaining a relationship – commitment depends on satisfaction, comparison with alternatives and investment
- satisfaction is determined by available alternatives – better alternatives equal less satisfaction
- investment acts as a deterrent to leaving a relationship – intrinsic investment – resources put into the relationship directly, eg emotion, effort etc – extrinsic investment – resources arising out of the relationship, eg children, mutual friends, possessions bought together.

Possible strengths:
- use of evidence to support Rusbult's model, eg Rhatigan and Axsom (2006) – women who had made less investment were less satisfied; Le and Agnew (2003) – showed the importance of satisfaction, alternative and investment in commitment; Rusbult (1998) – support for the model in homosexual couples
- Rusbult's model explains why people stay in relationships that appear to offer few rewards
- Rusbult's model is an improvement in relation to other theories, eg social exchange, equity.

Credit other relevant material.

Section B

Gender

| 1 | 0 | Which **one** of the following best describes Kohlberg's gender stability stage? Write the correct letter in your answer book**.**

[1 mark]

Marks for this question: AO1 = 1

B Knowing what gender you are now and understanding that you have always been the same gender and will stay the same gender in the future.

| 1 | 1 | Suggest a more appropriate statistical test of difference for the student to use with this data. Explain **two** reasons for your choice based on the description of the study.

[5 marks]

Marks for this question: AO3 = 5

1 mark for naming an appropriate test: Wilcoxon test (can also credit Sign test or related t-test)

Plus **one** mark for each of the following:

- same children judge both pictures
- so the study is a repeated/related design (not independent as would be appropriate for an unrelated t-test)
- data are ratings on a scale of liking 1–10, ie the child's subjective opinion
- there is no fixed unit of liking therefore the data are at the ordinal level of measurement/ non-parametric

3rd and 4th bullet for sign test: (can be treated as) nominal/categorical data plus justification - liking scale could be categorised into categories eg 'like', 'dislike'
3rd and 4th bullet for related t-test: can be treated as interval with justification ie test is robust enough to cope with data on a numerical scale

Appropriate reason can be credited even if an incorrect test is named or no test is given.

| 1 | 2 | The student who carried out the study selected the two pictures. He decided himself which were sex-stereotypical activities and which were non-sex-stereotypical activities.

Explain how the study could be improved by selecting the pictures another way.

[2 marks]

Marks for this question: AO3 = 2

Award marks as follows:

1 mark for an appropriate suggested modification: have an independent person/researcher who does not know the purpose of the study select the pictures; use a panel of raters who have nothing to do with the study.

1 mark for briefly explaining how this would improve the study: this would remove any chance of researcher or investigator bias/would increase validity.

Credit other relevant suggestions.

| 1 | 3 | Discuss sex-role stereotypes. Refer to the likely outcome of the student's study in your answer.

[8 marks]

Marks for this question: AO1 = 3, AO2 = 2, AO3 = 3

Level	Marks	Description
4	7–8	Knowledge of sex-role stereotypes is accurate with some detail. Application is effective. Discussion is 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 sex-role stereotypes is evident but there are occasional inaccuracies/omissions. Application/discussion 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 sex-role stereotypes is present. Focus is mainly on description. Any application/discussion 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 sex-role stereotypes is very limited. Application/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:
- a sex-role stereotype is set of ideas about behaviours/traits/qualities/characteristics that are appropriate/expected for males and for females
- sex-role stereotypes are generally shared by members of a society/culture
- sex-role stereotypes act as a short-cut to appropriate behaviours in a given context: girls will behave in ways they understand to be typically female and boys will behave in ways they understand to be typically male
- sex-role stereotypes are developed either through observation, imitation and reinforcement (SLT); through development of cognitive awareness of gender, eg through the development of gender constancy (Kohlberg); as part of the process of internalisation (Freud).

Possible application:
- at 7-years-old, children are aware of different expectations of males and females
- pictures of sex-role stereotypical behaviours are consistent with children's schema of what it means to be male or female so will be more acceptable

- children will rate more highly/prefer pictures showing sex-stereotypical behaviours.

Possible discussion points:
- use of evidence supporting/contradicting the existence of gender stereotypes and/or effects of stereotypes on gender-related behaviour, eg Smith and Lloyd (1973) – gender stereotyping by adults when playing with babies; Fagot (1992) – gender roles linked to parental behaviour; Furnham and Farragher (2000) – gender stereotyping in media adverts; Renzetti and Curran (1992) – teachers reinforce sex-stereotyped behaviours
- norms have shifted towards less stereotypical child-rearing and gender neutrality, eg clothing, toys, décor etc therefore sex-role stereotypes have less temporal validity
- negative effects of stereotypes, eg academic/career expectations
- positive effects of stereotypes – act as a cognitive short-cut
- relative influences of learning and biology on gender; cultural differences
- wider discussion in relation to determinism.

Credit other relevant material.

| 1 | 4 | Outline Bem's research into androgyny. Explain **one or more** limitation(s) of Bem's research. |

[8 marks]

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

Level	Marks	Description
4	7–8	Outline of Bem's research is accurate with some detail. Explanation of limitation(s) 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 Bem's research is evident but there are occasional inaccuracies/omissions. Explanation of limitation(s) is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	3–4	Outline of Bem's research is present. Any explanation of limitation(s) 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 Bem's research is very limited. Explanation 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:
- Bem devised the Sex Role Inventory as a measure of androgyny (BSRI)
- BSRI consists of 60 characteristics/traits – respondents rate themselves of a 7-point scale
- scores translate to two dimensions – masculinity-femininity and androgynous-unclassified
- Bem stated those with a high androgyny score are more psychologically healthy/better mental well-being than those who score as strongly masculine, strongly feminine (or undifferentiated).

Possible limitations:
- BSRI may be an oversimplification – should consider other factors, eg work role, abilities etc
- androgyny may not always be positive – associated with negative traits such as competitiveness
- modification to the original proposal – addition of undifferentiated
- social change in what constitutes typically male and female roles may mean BSRI is out-dated – masculinity and femininity are no longer so clearly differentiated – many children are raised to be gender-neutral
- use of evidence to counter Bem's views on androgyny and mental wellbeing.

Credit other relevant material.

Section B

Cognition and development

| 1 | 5 | Which **one** of the following best describes Piaget's concept of conservation? Write the correct letter in your answer book.

[1 mark]

Marks for this question: AO1 = 1

C Understanding that things are the same even though they look different.

| 1 | 6 | Suggest a more appropriate statistical test of difference for the student to use with this data. Explain **two** reasons for your choice based on the description of the study.

[5 marks]

Marks for this question: AO3 = 5

1 mark for naming an appropriate test: Wilcoxon test (can also credit Sign test or related t-test)

Plus **one** mark for each of the following:

- same children judge both pictures
- so the study is a repeated/related design (not independent as would be appropriate for an unrelated t-test)
- data are ratings on a scale of sadness 1–10, ie the child's subjective opinion
- there is no fixed unit of sadness therefore the data are at the ordinal level of measurement/ non-parametric

3rd and 4th bullet for sign test: (can be treated as) nominal/categorical data plus justification - sadness scale could be categorised into categories eg 'sad', 'not sad'
3rd and 4th bullet for related t-test: can be treated as interval with justification ie test is robust enough to cope with data on a numerical scale

Appropriate reason can be credited even if an incorrect test is named or no test is given.

| 1 | 7 | The student who carried out the study selected the two pictures. He decided himself which picture showed unkind behaviours and which picture showed kind behaviours.

Explain how the study could be improved by selecting the pictures another way.

[2 marks]

Marks for this question: AO3 = 2

Award marks as follows:

1 mark for an appropriate suggested modification: have an independent person/researcher who does not know the purpose of the study select the pictures; use a panel of raters who have nothing to do with the study.

1 mark for briefly explaining how this would improve the study: this would remove any chance of researcher or investigator bias/would increase validity.

Credit other relevant suggestions.

| 1 | 8 | Discuss Selman's research on perspective-taking. Refer to the likely outcome of the student's study in your answer.

[8 marks]

Marks for this question: AO1 = 3, AO2 = 2, AO3 = 3

Level	Marks	Description
4	7–8	Knowledge of Selman's research is accurate with some detail. Application is effective. Discussion is 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 Selman's research is evident but there are occasional inaccuracies/omissions. Application/discussion 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 Selman's research is present. Focus is mainly on description. Any application/discussion 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 Selman's research is very limited. Application/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:
- Selman focused on social understanding/social perspective-taking/role-taking
- proposed the ability to take perspective of others develops through 5 levels
- the levels show an age-related shift from egocentric view to broader cultural/moral understanding reflecting understanding of other people's points of view
- Selman's levels: egocentric, social informational role-taking, self-reflective role-taking, mutual/third party role-taking, social and conventional system (societal) role-taking
- introduced the idea of interpersonal dilemmas – stories requiring multiple perspectives and moral understanding, eg Holly and the kitten
- proposed applications, eg for interpersonal understanding and negotiation.

Possible application:
- at 9 years, most children will be in Selman's self-reflective role-taking stage.
- they will be able to put themselves in the place of the little boy in the pictures and appreciate his point of view.

- they will rate him as more sad in the 'unkind' picture condition than in the 'kind' picture condition.

Possible discussion points:
- neglects the importance of empathy and emotion – sole focus is on understanding
- does not differentiate between perspective-taking in family interaction and peer interaction situations
- does not take account of children's complex social worlds in modern society, eg family, nursery, step-families, on-line environments, cultural differences
- use of evidence to support/contradict Selman's theory, eg Gurucharri and Selman (1982) – longitudinal evidence for age-related change; Selman and Byrne (1974) viewpoint of characters in a dilemma, changes with age; Fitzgerald and White (2003) – linked parenting style and perspective taking
- parallels with Piaget's findings on egocentrism
- practical application in conflict resolution, family therapy, mediation etc.

Credit other relevant material.

| 1 | 9 | Outline Vygotsky's theory of cognitive development. Explain **one or more** strength(s) of Vygotsky's theory. |

[8 marks]

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

Level	Marks	Description
4	7–8	Outline of Vygotsky's theory is accurate with some detail. Explanation of strength(s) 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 Vygotsky's theory is evident but there are occasional inaccuracies/omissions. Explanation of strength(s) 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 Vygotsky's theory is present. Any explanation of strength(s) 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 Vygotsky's theory is very limited. Explanation 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:
- Vygotsky noted how social interaction/culture are fundamental to cognitive development – he stated child internalises the understanding of others
- proposed the child as an apprentice who has to develop tools of the culture, eg language, use of technology
- emphasised the role of language/semiotics in cognitive development – external/social speech leads to egocentric speech leads to inner speech/thought
- identified more knowledgeable others/experts who can provide framework for learning – scaffolding (stages of scaffolding)
- proposed stages of concept formation (vague syncretic, complex, systematic, mature concept)
- introduced idea of zone of proximal development – gap between what can be achieved alone and what can be achieved with assistance.

Possible strengths:
- valuable insights had an effect on teaching/learning – scaffolding, groups work, peer tutoring in the classroom
- his theory led to our understanding as parents as active in child's development and learning
- cross-cultural differences in concept development support Vygotsky's views on social interaction in cognitive development
- improvement in relation to other theories, eg Piaget's view of child as passive

- use of evidence to support theory, eg evidence for improved learning with scaffolding, eg Pratt (1992) – parental scaffolding with maths homework.

Credit other relevant material.

Section C

Schizophrenia

| 2 | 0 | Briefly outline and evaluate **one** study of validity in relation to diagnosis of schizophrenia.

[4 marks]

Marks for this question: AO1 = 2, AO3 = 2

Level	Marks	Description
2	3–4	Outline of a study of validity is clear and accurate. Evaluation is clear, coherent and appropriate.
1	1–2	Outline is limited or muddled. Evaluation is limited or inappropriate.
	0	No relevant content.

Possible content:
- Rosenhan 1973 – misdiagnosis of pseudo-patients and the follow-up studies
- Cheniaux 2009 – showed increase in diagnosis using ICD rather than DSM
- Cochrane 1977 – increased incidence in diagnosis of people of Afro-Caribbean origin
- Mason 1997 – high predictive validity between modern classification systems.

Possible evaluation points:
- methodological issues, eg sample size, control etc
- analysis of implications for patients/wider society if diagnosis not valid
- problems arising due to the use of separate classification systems.

Credit other relevant material.

2 1 Martine has schizophrenia. She is afraid because she believes that her care workers are trying to hurt her. She hears voices telling her to lock the doors and windows so the care workers cannot get into her house. She thinks about nothing else.

Explain how a cognitive behaviour therapist might treat Martine's symptoms.

[4 marks]

Marks for this question: AO2 = 4

Level	Marks	Description
2	3–4	Explanation of how cognitive behaviour therapy could be used to address Martine's symptoms is clear and appropriate. There is appropriate use of specialist terminology.
1	1–2	Explanation is limited, muddled or inappropriate. Use of specialist terminology is absent or inappropriate.
	0	No relevant content.

Possible application:
- Martine could be helped to identify her irrational thoughts/beliefs, eg her belief that care workers are trying to hurt her
- therapist could help Martine understand the voices are not real, explaining how it could be her own thoughts
- Martine could be helped to see the link between her thoughts (that the care workers are trying to hurt her), her emotion (being afraid) and her behaviour (locking the doors)
- therapist could offer Martine alternative interpretations, eg that the care workers are there to help/it is their job to help
- therapist could give Martine strategies to counter irrational thoughts, eg self-distraction strategies to use when the thoughts intrude; ways of drowning out the sound of the voices when they occur; positive self-talk strategies.

Credit other relevant material.

| 2 | 2 | Outline **one or more** biological explanation(s) for schizophrenia. Compare biological explanation(s) for schizophrenia with the family dysfunction explanation for schizophrenia.

[16 marks]

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

Level	Marks	Description
4	13–16	Knowledge of biological explanation(s) is accurate and generally well detailed. Comparison with the family dysfunction explanation 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 biological explanation(s) is evident but there are occasional inaccuracies/omissions. Comparison with the family dysfunction explanation 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 biological(s) explanation is present. Focus is mainly on description. Any comparison with the family dysfunction explanation 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 biological explanation(s) is very limited. Comparison 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:
- genetic transmission – schizophrenia is heritable through transmission of DNA/genes; familial link; twin studies/family studies/concordance rates; polygenic; candidate genes, eg PCM1; interaction between genes, eg NRG3 and NRG1/ERBB4
- dopamine hypothesis – excess activity of dopamine in subcortical areas; low activity of dopamine in cortex, especially pre-frontal area
- action of other neurotransmitters, eg higher levels of serotonin activity, reduced glutamate activity/NMDA receptor activity
- other neural correlates – enlarged ventricles, reduced grey matter, activity of basal ganglia, reduced activity in the superior temporal gyrus, anterior cingulate gyrus and ventral striatum.

Possible comparisons:
- role of the family – biological explanations implicate family passively through heritability whereas the family dysfunction explanation sees family as more actively responsible through their behaviour, eg high expressed emotion, poor communication; high conflict, schism and skew
- societal attitudes will differ – if family behaviour is seen as the 'cause' then families might be stigmatised, if biological, then family is less blameworthy
- both explanations have led to (effective) treatment
- both explanations are deterministic – but different types of determinism

- neither explanation can establish causality: in both cases the presumed cause might actually be a consequence, eg family might become dysfunctional as a result; altered neurochemistry/ neuroanatomy might be the effect rather than the cause
- comparison of evidence for each explanation, eg in terms of reliability/validity
- comparisons in relation to ethics, social sensitivity, nature-nurture stance, reductionist stance, nomothetic v idiographic approach.

Credit other relevant material.

Section C

Eating behaviour

| 2 | 3 | Briefly outline and evaluate **one** study of taste aversion.

[4 marks]

Marks for this question: AO1 = 2, AO3 = 2

Level	Marks	Description
2	3–4	Outline of a study of taste aversion is clear and accurate. Evaluation is clear, coherent and appropriate.
1	1–2	Outline is limited or muddled. Evaluation is limited or inappropriate.
	0	No relevant content.

Possible findings:
- Garcia (1977) – wolves and coyotes developed aversion (CR) to mutton/live sheep meat (CS) after induced sickness (UCR) pairing mutton with lithium chloride (UCS)
- Bernstein and Webster (1980) – adult humans developed aversion (CR) to ice-cream (CS) after pairing ice-cream (UCS) with nausea-inducing chemotherapy sessions (UCR)
- Garcia and Koelling (1966) – rats developed taste aversion (CR) to sweet water (CS) after pairing it with poison (UCS) – same effect did not occur when using electric shocks as the UCS.

Possible evaluation points:
- analysis of implications – findings suggest a preparedness to develop aversions to keep us safe, consistent with evolutionary theory about innate mechanisms for survival
- role of classical conditioning is complex – pairings must be related to ingestion of a substance, eg electric shock do not give same effect
- role of bitterness unclear – some bitter foods have protective effect on health
- methodological issues, eg extrapolation across species.

Credit other relevant material.

Note: studies of naturally occurring aversions to certain foods are also acceptable eg babies rejecting bitter foods (Desor 1973)

2 4 Charlene wants to be skinny like a super-model. She is dieting, eating very few calories. She has tried dieting before but always puts the weight back on afterwards. She thinks about food all the time and rewards herself occasionally by eating a giant pizza with chips.

Explain why Charlene's dieting might not be successful.

[4 marks]

Marks for this question: AO2 = 4

Level	Marks	Description
2	3–4	Explanation of why Charlene's dieting might not be successful is clear and appropriate. There is appropriate use of specialist terminology.
1	1–2	Explanation is limited, muddled or inappropriate. Use of specialist terminology is absent or inappropriate.
	0	No relevant content.

Possible application:
- Charlene's restrained eating may have a paradoxical effect – she is restricting food intake 'to few calories' but may end up eating more
- Charlene is on a very restrictive diet – low-calorie diets have unpleasant side-effects which might lead to abandonment of the diet
- Charlene shows intense pre-occupation with food, thinking about food all the time can lead to increased eating as forbidden foods become more salient
- Charlene alternates between restriction and disinhibited eating which can lead to weight gain
- Charlene has tried before but put the weight back on – 'yoyo' dieting is a repetitive cycle of loss and gain
- Charlene's past unsuccessful dieting attempts and her unrealistic target of being a skinny supermodel are indicators of likely failure.

Credit other relevant material.

| 2 5 | Outline **one or more** biological explanation(s) for anorexia nervosa. Compare biological explanation(s) for anorexia nervosa with the family systems explanation for anorexia nervosa. |

[16 marks]

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

Level	Marks	Description
4	13–16	Knowledge of biological explanation(s) is accurate and generally well detailed. Comparison with the family systems explanation 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 biological explanation(s) is evident but there are occasional inaccuracies/omissions. Comparison with the family systems explanation 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 biological explanation(s) is present. Focus is mainly on description. Any comparison with the family systems explanation 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 biological explanation(s) is very limited. Comparison 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:
- genetic transmission – anorexia is heritable through transmission of DNA/genes; familial link; twin studies/family studies/concordance rates/genome studies; polygenic; candidate genes, eg OPRD1, HTR1D, EPHX2
- reduced serotonin activity as demonstrated in lower levels of 5-HIAA in urine
- role of dopamine is controversial – levels can be lower/higher/same as controls: increased dopamine in AN as demonstrated by higher levels of homovanillic acid; recovering AN patients have increased D2 activity
- other transmitters – noradrenaline and GABA
- low levels of leptin which controls satiety
- other biological correlates – AN associated with birth complications and premature birth, poor maternal nutrition, season of birth, dysfunctional neural circuitry in the insula region.

Possible comparisons:
- role of the family – biological explanations implicate family passively through heritability whereas the family systems explanation sees family as actively responsible through their behaviour, eg high levels of control, enmeshment, over-protectiveness, rigidity, conflict avoidance etc

- family systems theory might better explain gender differences in incidence of AN – more prevalent in females – girls may be allowed less autonomy
- family systems theory might better explain increase in incidence of AN over time – increased pressures of modern family life might mean families are more critical/less supportive/more dysfunctional
- societal attitudes will differ – if the family are seen as the 'cause' then such families might be stigmatised
- implications for treatment – biological explanation is consistent with a biological approach to treatment, eg medication, whereas the family systems explanation would indicate that family therapy is important
- both explanations are deterministic – but different types of determinism
- neither explanation can establish causality: in both cases the presumed cause might actually be a consequence, eg family might become dysfunctional as a result; altered neurotransmitter levels might be an effect
- comparison of evidence for each explanation, eg in terms of reliability/validity.

Credit other relevant material.

Section C

Stress

| 2 | 6 | Briefly outline and evaluate **one** study of immunosuppression.

[4 marks]

Marks for this question: AO1 = 2, AO3 = 2

Level	Marks	Description
2	3–4	Outline of a study of immunosuppression is clear and accurate. Evaluation is clear, coherent and appropriate.
1	1–2	Outline is limited or muddled. Evaluation is limited or inappropriate.
	0	No relevant content.

Possible findings:
- Cohen (1993) – chance of developing a cold was significantly positively correlated with scores on a questionnaire of stressful life events over the year
- Kiecolt-Glaser (1984) – natural killer cell activity was significantly lower during periods of high stress (exam time) than during periods of low stress, with greater reduction in students reporting social isolation
- Kiecolt-Glaser (1991) – increase in antibodies to Epstein-Barr virus and in infectious illnesses in caregivers caring for people with Alzheimer's disease over a 13-month period compared to controls.

Possible evaluation points:
- contradictory findings, eg immunoenhancing effects of stress (Dharbar 2008)
- analysis of implications, eg importance of avoiding stress/learning to manage stress
- cause and effect cannot be established in correlational research – may be an alternative explanation for the correlation
- methodological issues, eg problems associated with self-report measures.

Credit other relevant material.

| 2 | 7 | Nadine has a busy job and is very stressed most of the time. When she thinks about work at night she feels her heart pounding very fast. She often feels anxious and is experiencing frequent headaches. |

Explain how a biofeedback therapist might help Nadine manage her stress.

[4 marks]

Marks for this question: AO2 = 4

Level	Marks	Description
2	3–4	Explanation of how biofeedback could be used to help Nadine manage her stress is clear and appropriate. There is appropriate use of specialist terminology.
1	1–2	Explanation is limited, muddled or inappropriate. Use of specialist terminology is absent or inappropriate.
	0	No relevant content.

Possible application:
- therapist would focus on Nadine's physiological symptoms such as heart pounding and headaches
- recording devices could be attached to Nadine's chest to measure her heart rate and to the muscles at the back of her neck to measure muscle tension
- normally occurring downward fluctuations in her heart-rate/muscle tension would be conditioned with either visual or auditory reward as positive reinforcement, eg icon of a happy face or hearing spoken 'Well done'
- using operant conditioning over a number of sessions, Nadine would be trained to lower her own stress response using the feedback about her heart rate and muscle tension at the back of her neck.

Credit other relevant material.

| 2 | 8 | Outline **one or more** self-report measure(s) of stress. Compare self-report measure(s) of stress with physiological measures of stress. |

[16 marks]

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

Level	Marks	Description
4	13–16	Knowledge of self-report measure(s) is accurate and generally well detailed. Comparison with physiological measures 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 self-report measure(s) is evident but there are occasional inaccuracies/omissions. Comparison with the physiological measures 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 self-report measure(s) is present. Focus is mainly on description. Any comparison with physiological measures 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 self-report measure(s) is very limited. Comparison 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:

SRRS (Holmes and Rahe):
- scale of 43 life events experienced over a specified time
- each event is scored in terms of life-change units (LCUs) – this was based on judgements of a sample of 100 'judges'
- LCUs accrue to give an overall life-change score
- scores given to indicate likelihood of suffering poor health, eg score over 300 LCUs related to 80% chance of illness in next year
- credit variations on the original SRRS.

Daily Hassles and Uplifts Scale (Kanner):
- used to measure events over a monthly period
- 117 negative events that could occur in a normal day, eg bad weather, arguments
- 135 positive events that could occur in a normal day, eg good news, seeing friends
- each hassle is measured on a 3-point scale (somewhat, moderate, extreme)
- hassles are correlated with undesirable psychological symptoms such as anxiety and depression; effects of uplifts were unclear.

Possible comparisons:
- self-report measures are used retrospectively whereas physiological measures can be used to record stress in real time
- self-report measures are less objective – they reflect subjective experience whereas physiological measures (eg GSR) are objectively observable
- self-report measures are used in correlational research whereas physiological measures can be used experimentally, eg exposing a participant to a stressor whilst recording GSR
- self-report measures are more useful for measuring on-going stress and in long-term research
- both measures provide quantitative data that can be analysed, eg LCUs can be correlated with health conditions
- both measures have validity issues – there are individual differences in interpretation of the events on a self-report scale and GSR may reflect general arousal (general ANS activity) rather than stress.

Credit other relevant material.

Section D

Aggression

2 9   Describe neural mechanisms in aggression.

[6 marks]

Marks for this question: AO1 = 6

Level	Marks	Description
3	5–6	Description is clear, accurate and detailed. Specialist terminology is used effectively.
2	3–4	Description is mostly clear but lacks detail in places. There is some appropriate use of specialist terminology.
1	1–2	Description is limited/muddled. The answer lacks clarity and accuracy. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:
- limbic system, particularly the hypothalamus and amygdala, is responsible for aggressive behaviour
- fMRI scans show heightened amygdala activity during aggressive response
- stimulation of the amygdala can increase/decrease aggression response
- frontal cortex moderates the expression of aggression – reduced serotonin activity in the prefrontal cortex is related to reduced self-control/disinhibition
- lower levels of 5-HIAA (by-product of serotonin breakdown) are found in impulsive/poorly controlled offenders
- testosterone may mediate the activity of the amygdala and/or the orbitofrontal cortex.

Credit other relevant material

| 3 | 0 | Jane is talking about her husband to a friend. |

Jane says, "Bill gets angry if I text any of my male friends. He's always looking at my mobile phone. He gets upset if I want to go out with friends and insists on coming along too. I suppose it is nice in a way because he is so strong and protective."

Use your knowledge of evolutionary explanations of aggression to explain Jane's comments.
[4 marks]

Marks for this question: AO2 = 4

Level	Marks	Description
2	3–4	Explanation of how the evolutionary explanation for aggression could be used to explain Jane's comments is clear and appropriate. There is appropriate use of specialist terminology.
1	1–2	Explanation is limited, muddled or inappropriate. Use of specialist terminology is absent or inappropriate.
	0	No relevant content.

Possible application:
- evolutionary theory states that males compete for females – Bill gets angry because he sees Jane's male friends as potential rivals – this is an example of sexual jealousy
- Bill is anxious to prevent Jane forming a relationship with other males so as to avoid cuckoldry, ie Jane being unfaithful
- Bill shows mate retention strategies, eg checking Jane's mobile is an example of male vigilance over partner's behaviour; going along on nights out is an example of direct guarding
- Jane is referring to Bill as a dominant male (strength and protectiveness)

Credit other relevant material.

| 3 | 1 | Outline **one** strength **and one** limitation of evolutionary explanations of aggression.

[6 marks]

Marks for this question: AO3 = 6

For the strength, award marks as follows:

3 marks for a clear, coherent and detailed outline, using appropriate terminology.
2 marks for an outline which lacks some detail.
1 mark for a very limited/muddled outline.

Possible strengths:
- use of evidence to support evolutionary theory of aggression, eg parallels in the animal kingdom
- consistent with findings that show there are differences in aggression between males and females
- can explain many types of aggression, eg bullying to maintain a position of dominance; aggression related to power struggles at work etc.

PLUS

For the limitation, award marks as follows:

3 marks for a clear, coherent and detailed outline, using appropriate terminology.
2 marks for an outline which lacks some detail.
1 mark for a very limited/muddled outline.

Possible limitations:
- use of evidence to contradict the evolutionary theory of aggression
- difficult to test as evidence is correlational and usually involves self-report
- cannot explain cultural differences in aggression – evolutionary explanations should apply to all cultures in the same way
- presents male aggression as a natural and therefore acceptable behaviour
- implications for treatment of male aggression.

Credit other relevant strengths and limitations.

| 3 | 2 | Discuss the frustration-aggression hypothesis as an explanation for human aggression.

[8 marks]

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

Level	Marks	Description
4	7–8	Knowledge of the frustration-aggression hypothesis as an explanation for human aggression 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	Knowledge of the frustration-aggression hypothesis as an explanation for human aggression 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 knowledge of the frustration-aggression hypothesis as an explanation for human aggression is present. 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	Knowledge of the frustration-aggression hypothesis as an explanation for human aggression 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:
- Dollard and Millar (1939) stated frustration always results in aggression and aggression is always caused by frustration
- frustration equals blocking of any goal-directed action
- this leads to tension that can only be relieved by an aggressive act – aggression is cathartic
- focus of aggression is not always the cause of frustration – aggression can be displaced
- likelihood of aggression depends on proximity to goal and the chance aggression will enable the goal to be achieved
- aggression becomes the dominant/most likely response if it has been rewarded in the past
- original theory modified to include role of social/environmental cues, eg weapon effect (Berkowitz, 1989).

Possible discussion points
- use of evidence to support/contradict the FA hypothesis
- Berkowitz's arguments that aggression results from other factors too, eg negative mood/feelings
- aggression may not be cathartic – might stimulate more intense emotion
- differing effects depending on type of frustration – justified or unjustified – less aggression with justified frustration
- cannot explain aggressive acts that are cold and calculated
- discussion in the context of both psychodynamic theory (aggressive drives/catharsis) and learning theory (effects of past aggressive behaviour).

Credit other relevant material.

Section D

Forensic psychology

| 3 | 3 | Describe psychodynamic explanation(s) for offending behaviour.

[6 marks]

Marks for this question: AO1 = 6

Level	Marks	Description
3	5–6	Description is clear, accurate and detailed. Specialist terminology is used effectively.
2	3–4	Description is mostly clear but lacks detail in places. There is some appropriate use of specialist terminology.
1	1–2	Description is limited/muddled. The answer lacks clarity and accuracy. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:
- superego-based explanations – id is insufficiently controlled/moderated – deviant superego due to identification with deviant parent in Phallic stage; under-developed/weak superego due to failure to identify fully in Phallic stage; over-harsh superego is excessively punitive so crimes are committed to fulfil unconscious desire for punishment
- attachment-based explanation – Bowlby stated maternal deprivation leads to consequences such as affectionless psychopathy and delinquency
- defence mechanisms allow the criminal to unconsciously justify criminal behaviour, eg a criminal might use rationalisation, eg 'rich people deserve to be burgled because they have much more than everyone else'.

Credit other relevant material.

| 3 | 4 |

Peter is talking about his offending.

Peter says, "I don't know why it happens. Sometimes when I hear people telling stupid jokes in a bar, I just get cross and punch them. I get into a rage and feel my pulse racing. If only I had another way of dealing with it. I just need to get used to controlling myself."

Explain how an anger management therapist could help Peter.

[4 marks]

Marks for this question: AO2 = 4

Level	Marks	Description
2	3–4	Explanation of how anger management could be used to deal with Peter's offending is clear and appropriate. There is appropriate use of specialist terminology.
1	1–2	Explanation is limited, muddled or inappropriate. Use of specialist terminology is absent or inappropriate.
	0	No relevant content.

Possible application:
- therapist would help Peter to understand the specific triggers/cues that precipitate his anger, such as being in the bar/hearing stupid jokes – this is the cognitive preparation stage
- therapist would teach Peter skills to calm himself so his pulse does not race, eg teach him a mantra or positive self-statements, eg 'I am calm and relaxed' – the skills acquisition stage
- therapist would give Peter chance to rehearse difficult situations in role-play sessions so he could get used to using self-control and not be provoked by 'hearing people talk' – the application training/practice stage
- therapist would give constructive feedback to Peter on his performance in the practice situations
- Peter would practise his new skills during the week and make a diary of his performance in anger provoking situations, eg arguments in the gym.

Credit other relevant material.

| 3 | 5 | Outline **one** strength **and one** limitation of anger management as a way of dealing with offending.

[6 marks]

Marks for this question: AO3 = 6

For the strength, award marks as follows:

3 marks for a clear, coherent and detailed outline, using appropriate terminology.
2 marks for an outline which lacks some detail.
1 mark for a very limited/muddled outline.

Possible strengths:
- use of evidence to support the effectiveness
- addresses the thoughts/beliefs that underpin aggression, not just the behaviour – links to models in cognitive psychology
- promotes transferable skills such as self-reflection, self-confidence and self-control which can be generally life-enhancing
- comparison with behaviour modification, eg anger management is more long-term.

PLUS

For the limitation, award marks as follows:

3 marks for a clear, coherent and detailed outline, using appropriate terminology.
2 marks for an outline which lacks some detail.
1 mark for a very limited/muddled outline.

Possible limitations:
- requires the skills of a trained therapist so limited availability in prisons and expensive compared to reward-based behaviour management programmes
- relies on practising skills in role-play situations so unlike a real-life incident
- only useful for clients whose offences are caused by aggression – many offences are not aggression driven
- questions over long-term effectiveness – some studies show short-term only
- not all clients benefit – need to be motivated to change and engage properly in sessions and doing homework tasks.

Credit other relevant strengths and limitations.

| 3 | 6 | Discuss neural explanations for offending behaviour.

[8 marks]

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

Level	Marks	Description
4	7–8	Knowledge of neural explanations for offending 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	Knowledge of neural explanations for offending 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 knowledge of neural explanations for offending is present. 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	Knowledge of neural explanations for offending 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:
- irregularities in levels of neurotransmitters have been linked to violence/offending, eg high levels of noradrenaline – violence and aggression; low levels of serotonin – greater impulsivity; dopamine indirectly linked through role in addiction
- shortened version of the MAOA gene may alter levels of neurotransmitters dopamine and serotonin
- reduced limbic system activity in psychopathic offenders when exposed to tasks requiring emotional processing (Kent 2001)
- reduced frontal lobe volume in people with anti-social personality disorder (Raine 2000)
- reduced activity in the pre-frontal cortex which controls emotional behaviour (Raine 2000)
- poor executive functioning affecting cognitive control and decision-making linked to juvenile offending (Morgan and Lilienfeld 2000)
- lower EEG arousal (suggesting cognitive immaturity) at age 15 years linked to later criminal activity (Raine 1990).

Possible discussion points:
- cause and effect cannot be established in any human studies – all rely on correlation so other variables could be responsible for the offending behaviour – only animal studies are experimental
- many studies link genes with anti-social personality disorder and/or substance abuse but not necessarily with offending
- biological determinism and implications of accepting that offending is due to biological function, eg implications for the justice system and for dealing with offending.

- reductionism – need to look at wider factors such as social context, substance abuse, mental illness, upbringing etc
- comparison with social-psychological explanations, eg social learning theory; cognitive explanations or alternative biological explanations, eg genetic.

Credit other relevant material.

Section D

Addiction

3 7   Describe how brain neurochemistry is involved in nicotine addiction.

[6 marks]

Marks for this question: AO1 = 6

Level	Marks	Description
3	5–6	Description is clear, accurate and detailed. Specialist terminology is used effectively.
2	3–4	Description is mostly clear but lacks detail in places. There is some appropriate use of specialist terminology.
1	1–2	Description is limited/muddled. The answer lacks clarity and accuracy. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:
- nicotine binds with nicotinic receptors (a type of acetylcholine receptor) in the ventral tegmental area
- this triggers release of dopamine in the nucleus accumbens in the mesolimbic system (reward centre of the brain)
- activation of reward pathway creates feeling of euphoria and reduced anxiety
- nicotine regulation model – abstinence (eg overnight) leads to increased sensitivity of nicotinic receptors and withdrawal, causing motivation to smoke
- through repeated activation, more nicotine is required to create the same effect (tolerance) which results in craving (addiction)
- nicotine activates natural opioids in the brain (enkephalins and endorphins) creating feelings of pleasure
- role of GABA and serotonin – nicotine increases serotonin

Credit other relevant material.

| 3 | 8 | Bertie is talking about his addiction to chocolate. |

Bertie says, "I can't stop eating chocolate. I just need more and more. Eating chocolate gives me such a great feeling. I get comfy on the sofa then stuff myself with chocolate till I feel all warm and happy. I'm spending so much money on chocolate, I don't know what to do."

Explain how covert sensitisation could be used to treat Bertie's addiction.

[4 marks]

Marks for this question: AO2 = 4

Level	Marks	Description
2	3–4	Explanation of how covert desensitisation could be used to deal with Bertie's addiction is clear and appropriate. There is appropriate use of specialist terminology.
1	1–2	Explanation is limited, muddled or inappropriate. Use of specialist terminology is absent or inappropriate.
	0	No relevant content.

Possible application:
- Bertie would be taught to relax then therapist would use vivid guided imagery
- Bertie would be guided to visualise noxious chocolate-related images
- images could be visual, auditory, olfactory, tactile
- examples: Bertie vividly imagines himself eating heaps of chocolate then vomiting chocolate over his clothes; Bertie vividly imagines an overpowering sweet smell of chocolate that makes him feel he is suffocating
- by pairing the previously neutral substance chocolate (NS) with an unpleasant/noxious mental experience (UCS) Bertie develops a classically conditioned aversion (CR) to chocolate (CS)
- the more vivid/graphic the chocolate images the more effective the treatment
- Bertie's classically conditioned aversion to chocolate means he avoids chocolate in the future.

Credit other relevant material.

| 3 | 9 | Outline **one** strength **and one** limitation of covert sensitisation as a way of reducing addiction.

[6 marks]

Marks for this question: AO3 = 6

For the strength, award marks as follows:

3 marks for a clear, coherent and detailed outline, using appropriate terminology.
2 marks for an outline which lacks some detail.
1 mark for a very limited/muddled outline.

Possible strengths:
- use of evidence to support the effectiveness, eg comparison with aversion therapy/control conditions.
- underpinned by highly scientific theory and tested behaviourist principles
- more ethical in comparison to traditional in vivo aversion therapy – covert sensitisation is less traumatic and more dignified
- flexible so can be used with all types of addictive substances and with addictive behaviours, eg gambling.

PLUS

For the limitation, award marks as follows:

3 marks for a clear, coherent and detailed outline, using appropriate terminology.
2 marks for an outline which lacks some detail.
1 mark for a very limited/muddled outline.

Possible limitations:
- based on behaviourism so addresses the outward behaviour only – does not address the original cause so there is potential for relapse
- sustainability of effect over the long-term – questions over long-term effectiveness
- effectiveness is limited where the client is not well motivated or lacks the capacity for imagination.

Credit other relevant strengths and limitations.

| 4 | 0 | Discuss cognitive bias as a way of explaining gambling addiction. |

[8 marks]

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

Level	Marks	Description
4	7–8	Knowledge of cognitive bias as an explanation for gambling addiction 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	Knowledge of cognitive bias as an explanation for gambling addiction 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 knowledge of cognitive bias as an explanation for gambling addiction is present. 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	Knowledge of cognitive bias as an explanation for gambling addiction 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:
- cognitive biases/distortions lead to distorted understanding of chance outcomes
- types of bias:
    - control bias – belief that outcomes can be predicted or controlled – illusion of control
    - ritual bias – belief that outcome can be controlled by using 'lucky' rituals, eg blowing on dice
    - perceptual bias/gambler's fallacy – the faulty belief that a run of losses must be followed by a win
    - selective recall/availability bias – recalling wins and forgetting losses
    - skill bias – belief in possession of special skill or knowledge, eg choosing lottery numbers or choosing a winning horse
    - near-win bias – gambler perceives a near-miss loss as a near win.

Possible discussion points:
- use of evidence to support/contradict the role of cognitive bias in gambling
- role of mediating factors – individual differences, eg self-efficacy, impulsivity, desire for control
- some types of bias are better at explaining some gambling addictions than others, eg gambler's fallacy is more likely to operate where gambling involves slot-machine or roulette throws
- comparison with alternative explanations for gambling addiction, eg learning theory, reinforcement and cue sensitivity
- cognitive bias is better at explaining maintenance than initiation
- implications for treatment – if cognitive bias makes people susceptible to gambling then cognitive therapy to alter perception of control might help gamblers.

Credit other relevant material.