

Student responses with examiner commentary (based on SAM1)

A-level Psychology 7182/3
Issues and Options in Psychology

[First teaching: September 2015]

[First Examination: Summer 2017]

Introduction

These resources should be used in conjunction with the Specimen Assessment Material (7182/3) from the AQA website. This document illustrates how examiners intend to apply the mark scheme in live papers. The question papers will be marked using a levels of response mark scheme. These answers and the accompanying commentaries have been produced to help you understand what is required to achieve the different levels and how the mark scheme is to be interpreted. These principles of marking apply across all papers.

While every attempt has been made to show a range of student responses, the following responses, and examiner comments provide teachers with the best opportunity to understand the application of the mark scheme. Responses have not been produced for every question but rather cover a variety of different types of questions and topic areas.

*Please note that the students' responses have been typed exactly as they were written.

Issues and debates in Psychology

QUESTION

02 Briefly outline **one** problem associated with alpha bias in psychological research, **and one** problem associated with beta bias in psychological research.

[4 marks]

MARK SCHEME

Marks for this question: AO3 = 4

In each case:

2 marks for a brief, clear and coherent outline of the problem.

- In the case of alpha bias there is a misrepresentation of behaviour researchers/theorists overestimate/exaggerate gender differences
- In the case of beta bias there is a misrepresentation of behaviour because researchers/theorists underestimate/minimise gender differences

1 mark for a problem partially outlined or merely stated.

Credit other valid problems.

Exemplar Response

The problem with alpha biased research is that gender differences are exaggerated and this leads to stereotypes which can be seen in the diagnosis of mental illness.
Beta bias is when gender differences are underplayed but in fact do exist.

Examiner commentary

This answer shows knowledge of alpha bias and a clear problem outlined – that it can lead to stereotyping – 2 marks.

With respect to beta bias the problem is not explicit but merely hinted at and this would only gain 1 mark.

Mark awarded = 3

QUESTION

03 Briefly outline what psychologists mean by 'levels of explanation'.

[2 marks]

MARK SCHEME

Marks for this question: AO1 = 2

2 marks for clear and coherent outline which explains how explanations vary from those at a lower or fundamental level focusing on basic components or units to those at a higher more holistic multivariable level.

1 mark for vague or incomplete outline which refers to explanations at fundamental/basic and more holistic levels.

0 marks for mere reference to there being different levels of explanation.

Credit answers where knowledge of term is embedded in an example.

Exemplar Response

Behaviour can be explained at different 'levels' of complexity, from simple biological explanations to more complex explanations.

Examiner commentary

This answer makes a relevant point concerning 'complexity' and gives an example of a simpler level 'biology' but needs further outline to gain full marks.

The answer would not need much to gain a further mark, for example it could be followed with something like: A genetic explanation would be at the most basic level of explanation whereas an eclectic or holistic level would be more complex where a combination of explanations would be used.

Mark awarded = 1

QUESTION

04 Read the item and then answer the question that follows.

A prison psychologist used an idiographic approach to study offending. He asked two offenders to record their thoughts about their childhood and their offending behaviour in a journal over a period of four weeks.

Qualitative analysis of the journals showed that the offenders often thought about sad childhood events and believed that their childhood experiences had influenced their offending.

Findings from idiographic research like the study described above are often used as a basis for other investigations.

Explain how the researcher might develop the above investigation through taking a nomothetic approach.

[6 marks]

MARK SCHEME

Marks for this question: AO3 = 6

Level	Marks	Description
3	5–6	Proposals for developing the research by taking a nomothetic approach are clear and appropriate. Explanation is mostly effective. Specialist terminology is mostly used effectively. There is clear focus on the question.
2	3–4	Proposals for developing the research by taking a nomothetic approach are apparent and mostly appropriate. Explanation is partly effective. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–2	There is some useful proposal of how the researcher could develop the research by taking a nomothetic approach. Explanation is limited and/or poorly focused. The answer as a whole lacks clarity, has inaccuracies and is poorly organised. Specialist terminology is often used inappropriately.
	0	No relevant content.

Explanation possible points:

- taking a nomothetic approach would involve the researcher testing a larger sample of offenders
- sampling should involve a method of sample selection to give representativeness of a larger population, eg random sampling of the prison population
- the researcher would probably use a testable hypothesis, eg violent offenders have more negative thoughts about childhood than non-violent offenders
- taking a nomothetic approach would involve collection of a large amount of data
- analysis would probably involve quantitative methods, eg statistical testing and the drawing of conclusions in relation to a wider population
- credit also comparison of the worth of idiographic and nomothetic approaches, eg how idiographic investigations yield information that is rich, in-depth (journals inform about the precise nature of the negative thoughts enabling greater insight) whereas nomothetic investigations enable the formulation of general laws, eg offenders have a more negative view of their childhood.

Credit other relevant explanatory points.

Exemplar Response

A nomothetic approach requires the study of a reasonably large representative sample of the target population in order to be able to find out general 'laws of behaviour'. The researcher could approach the authorities in a range of male and female prisons involving different levels of offence to gain approval to use offenders in an investigation. The researcher could then select a random sample of offenders, willing to assist in the study, from each institution to give a sample of, for example, 100 offenders reflecting the relative numbers of male and female offenders in prison. A standardised set of instructions would be devised and a questionnaire created, with closed and open questions, concerning the two issues under research, namely, 'childhood time spent with families' and 'offending behaviour'. When the completed questionnaires are received, the answers would be analysed. Closed questions would produce quantitative data. The open questions could undergo content analysis to produce useful data about key recurrent features. For this analysis it should be possible to develop generalisations about the two aspects of the study.

Examiner commentary

This is a Level 3 response because there is clear and appropriate knowledge of nomothetic research (eg representative sample, generalisation, use of questionnaire etc). There is a clear focus on the question and although there is some detail that could be expanded eg concerning the analysis of the data, the explanation given is coherent and plausible and specialist terminology is used appropriately throughout.

Mark awarded = 6

QUESTION

05 What is meant by the 'nature-nurture debate' in psychology?

[2 marks]

MARK SCHEME

Marks for this question: AO1 = 2

2 marks for the possibility that behaviour is governed by nature (genes etc) and by nurture (eg environment, experiences etc) and reference to the debate being about the relative contribution of each of these influences.

1 mark for reference to the possibility that behaviour is governed by nature (genes etc) and (or) by nurture (eg environment, experiences).

0 marks for focus solely on one possible explanation (nature or nurture) or no relevant content.

Exemplar Response

The nature nurture debate attempts an explanation in terms of whether something is inherited/genetic (nature) or due to environmental factors such as learning.

Examiner commentary

This response appropriately defines both sides of the debate with an example (which would gain 1 mark). What the response fails to do is to consider that the debate is concerned with the relative contribution of each.

Mark awarded = 1

QUESTION

06.1 Briefly explain the outcome of the study in relation to the nature-nurture debate.

[2 marks]

MARK SCHEME

Marks for this question: AO2 = 2

1 mark appears to support the nature side of the debate.

Plus

1 mark because the concordance rate is stronger in the identical twins where there is greater genetic relatedness (or nurture must also play a role – not 100% concordance).

Full credit can be awarded to answers which argue for mathematical ability being partly due to nurture as both percentage concordance rates are less than degree of genetic relatedness.

Exemplar Response

Results supportive of the impact of nature on mathematical reasoning, since concordance for identical twins (shared genes) is higher than for non identical twins (50% shared genes) – 58% v 14%.

Also offers some support for nurture since identical twins concordance is not 100%. Therefore nurture may account for remaining 42%. If only nature responsible concordance for identical twins should be 100%.

Examiner commentary

This is a full answer that covers both aspects of the mark scheme. The first sentence would have gained the full marks as it points to the impact of nature (1 mark) and links to the findings and genetic relatedness (1 further mark).

Mark awarded = 2

QUESTION

6.2 Some ways of establishing validity involve the use of a statistical test.

Outline how these researchers could have used a statistical test to establish **concurrent** validity of the mathematical reasoning ability test.

[4 marks]

MARK SCHEME

Marks for this question: AO2 = 4

Level	Marks	Description
2	3–4	Answer focuses clearly on concurrent validity. How a correlational test would be used to determine the relationship between the two sets of scores is clearly described with reference to calculation of a correlation coefficient and need for a significant positive correlation.
1	1–2	Answer focuses on validity. How a correlational test would be used to determine the relationship between the two sets of scores is partly described. The answer lacks accuracy and detail.
	0	No relevant content.

Content:

- concurrent validity would involve correlating the results on the maths test with results for the same group of people on an established maths reasoning test
- A Spearman's rho or Pearson's r test should be used for the two sets of test results
- if the mathematical ability test is valid then there should be a significant positive correlation between the two sets of test scores at the 0.05 level.

Exemplar Response

Researchers could ask the same sample to take two tests. The mathematical reasoning test under question and another, previously validated maths test.
Using a test of correlation (Spearman's or Pearson's) a high positive correlation should result from the analysis if the maths test is a valid measure.

Examiner commentary

This is a Level 1 answer. Although there is knowledge shown regarding the need for the sample to take 2 maths tests, it is not clarified that the results from these would be correlated – ie it is not clear from this answer how the correlational test would be used. The named tests are appropriate but for the maths test to have concurrent validity there should be a significant positive correlation (the correlation might be 'high' but not significant). The answer lacks sufficient detail.

Mark awarded = 2

Topic: Relationships

QUESTION

11 Discuss evolutionary explanations for partner preferences.

[16 marks]

MARK SCHEME

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

Level	Marks	Description
4	13–16	Knowledge of evolutionary explanations for partner preferences is accurate and generally well detailed. Discussion is thorough and effective. The answer is clear, coherent and focused. Specialist terminology is used effectively. Minor detail and/or expansion of argument sometimes lacking.
3	9–12	Knowledge of evolutionary explanations for partner preferences is evident. There are occasional inaccuracies. Discussion is apparent and mostly effective. The answer is mostly clear and organised. Specialist terminology is mostly used effectively. Lacks focus in places.
2	5–8	Some knowledge of evolutionary explanation(s) for partner preferences is present. Focus is mainly on description. Any discussion is only partly effective. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–4	Knowledge of evolutionary explanation(s) for partner preferences is limited. Discussion is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology either absent or inappropriately used.
	0	No relevant content.

Possible content:

- natural selection theory: genes that confer reproductive advantage will increase in the gene pool
- intra-sexual selection – members of one sex (usually male) compete for access to the other sex (usually female) leading to male-female dimorphism – accentuation of secondary sexual characteristics in those with greater reproductive fitness
- inter-sexual selection – one sex (usually females) chooses from available prospective mates (usually males) according to attractiveness; biological marketplace explanation (Noe and Hammerstein 1995), genes that confer attractive qualities are more ‘saleable’.

Possible evaluation points:

- apparent conflict between natural selection and sexual selection
- use of evidence to support or contradict theory, eg in favour of natural selection, eg studies of feature preferences in males and females, eg waist-hip ratio, facial symmetry
- animal evidence, eg mating strategies/parental investment and extrapolation to humans
- some explanations for female mate choice seem contrary to evolution – Fisher (1930) ‘good-taste hypothesis’; Zahavi (1975) handicap/good-genes hypothesis
- sexual strategies theory – partner selection strategies differ according to what each partner wants from different type of relationship (long-term or short-term).

Credit other relevant evaluation points.

Only credit evaluation of the methodology used in studies when made relevant to discussion of the explanations.

Exemplar Response

Evolutionary explanations for partner choice follow principles of sexual selection – related to the need for reproductive success and reproductive advantage.

Fisher argued for the runaway hypothesis. Female choice based on survival traits seen in movies, eg survival of fittest/selfish gene etc. Offspring would inherit these survival attributes.

Sexual selection and extravagant traits (eg peacock tail feathers) do not offer increased survival but increased social selection potential.

Males and females have evolved different levels of reproductive success (and therefore mate choice) with regard to size of gametes.

Mating systems have also evolved to influence sexual selection and reproductive success eg polygamy. Fox argues that partner selection is also a result of mental evolution or adaptation.

However, evolutionary explanations assume that mate choice is driven by reproductive success. Humans choose a mate for other reasons.

A deterministic theory whereas humans draw upon higher thought processes. This can explain higher child abuse rates in families. Alternative theories focus more on psychological explanations rather than biologically based ones. Does not explain mate choice in those who are beyond their reproductive years. Much drawn from animal behaviour.

Examiner commentary

This is a Level 2 answer. It has the potential to be a top level answer, but reads more like a plan or series of notes than a discursive essay. Nevertheless, there is a lot of relevant content that is easily discernible and it might be a student who is ‘running out of time’. The answer reads rather descriptively because the evaluative points are stated rather than used as part of a discussion. There is also a lack of clarity and essay structure.

Mark awarded = 7

Topic: Cognition and development

QUESTION

21 Describe and evaluate Vygotsky's theory of cognitive development.

[16 marks]

MARK SCHEME

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

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

Possible content:

- social interactionist theory – focus on role of social interaction and culture in development of cognition – how child internalises the understanding of others
- through social interaction child develops tools of culture, eg language
- importance of language – enables shift from elementary mental functions to higher mental functions; external monologue > inner speech > internalised thought
- scaffolding – more knowledgeable others (parents, older peers, teachers, siblings) provide a supportive framework which is gradually withdrawn
- zone of proximal development – gap between what child can do unaided and what child can do with help – difference between current ability and potential ability – where scaffolding operates to extend child's abilities.

Credit other relevant Vygotskian concepts.

Possible evaluation points:

- evidence in favour of Vygotsky, eg Wood and Middleton (1975)
- evidence against Vygotsky, eg tutoring does not accelerate learning Gelman (1969)
- cross-cultural findings to support role of social factors
- implications for education – peer tutoring, classroom organisation, role of the teacher
- comparisons with Piaget – social interactionism vs constructivism; different views on the role of language (key to thought vs by-product of thought); child as apprentice vs child as scientist.

Credit other relevant evaluation points.

Only credit evaluation of the methodology used in studies when made relevant to evaluation of the explanation.

Exemplar Response

Vygotsky believed cognitive development was a social process and he believed children developed their understanding and reasoning through interactions with caregivers and others. Development, even cognitive development, was considered to be social and cultural. Children are born able to engage in social interaction with others and from these early interactions the child can develop intelligence.

Vygotsky thought of the child as 'an apprentice' who learns from more knowledgeable others. He used the term zone of proximal development (ZPD) which is the difference between what the child knows now and what the child can learn next with the help of others. The child can be pushed through this ZPD so that they learn things from others, and others can gradually reduce aid until the child has stand alone competence. This is the same as the idea of scaffolding.

Vygotsky also thought language was important in cognitive development with egocentric speech upto about 7 years which is where the child engages in self talk – a kind of thinking aloud and this then at about age 7 years moves into inner speech where the self talk becomes an internal conversation and language is used to communicate. There is some evidence for Vygotsky's ideas about egocentric speech becoming internalised, for example Berk found children do talk to themselves more when working on difficult tasks (egocentric speech) but this decreased with age as would be predicted by Vygotsky's theory.

A criticism levelled at Vygotsky is that he overemphasised social factors when perhaps, for example, biological maturation plays a large part in cognitive development too. But Vygotsky has had a big impact on education where things like peer tutoring commonly occur in schools when the child learns from more able peers. This idea of a child learning from others and having their learning speeded up is in direct conflict to Piaget's theory of cognitive development that states that a child can only learn when ready.

Examiner commentary

This is a Level 3 answer. There is sound knowledge of Vygotsky's theory of cognitive development, including some empirical evidence, although there are occasional inaccuracies or lack of expansion. For example, although 'scaffolding' is similar to the 'zone of proximal development' it is not "the same", as stated in the answer. There is some evaluation which is brief but largely effective. For example, the contrast with Piaget could have been explained in more detail, it rather appears to have been just thrown in at the end.

Overall, though, the answer is clear and mainly focussed on the question and there is appropriate use of specialist terminology.

Mark awarded = 9

Topic: Schizophrenia

QUESTION

22 Using your knowledge of schizophrenia, explain why Louise is now showing symptoms of schizophrenia.

[4 marks]

MARK SCHEME

Marks for this question: AO2 = 4

Level	Marks	Description
2	3–4	Knowledge of both components of the diathesis-stress model is clear and mostly accurate. The material is used appropriately to explain Louise's schizophrenia. The answer is generally coherent with effective use of terminology.
1	1–2	Some knowledge of the diathesis-stress model is evident. Links to Louise's schizophrenia are not always effective. The answer lacks accuracy and detail. Use of terminology is either absent or inappropriate.
	0	No relevant content.

Content:

Application of the diathesis-stress model as follows:

- genetic vulnerability interacts with stressful life events which trigger schizophrenia
- family background = genetic vulnerability
- losing parent/going to university = stressful events.

Exemplar Response

Louise's recent illness can be explained in terms of the diathesis stress model – which is where someone has a genetic vulnerability to schizophrenia as suggested by other family members with the same illness – grandparent/ aunt, which is only triggered under stressful events. This predisposition may then have been triggered in Louise by the stressful events of her father's death and starting a course at university. Both of these could have triggered the illness.

Examiner commentary

This is a Level 2 response. Knowledge of both genetic vulnerability and stress is evident and these are appropriately linked to explain the symptoms of schizophrenia experienced now by Louise. The answer is clear and coherent and uses specialist terminology (eg diathesis-stress, vulnerability etc.) effectively.

Mark awarded = 4

QUESTION

- 23 Briefly outline how cognitive behaviour therapy (CBT) is used to treat schizophrenia **and** explain **one** limitation of using CBT to treat schizophrenia.

[4 marks]

MARK SCHEME

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

Level	Marks	Description
2	3–4	Outline of the use of CBT for schizophrenia is clear and has some detail. A limitation relevant to schizophrenia is clearly explained. The answer is generally coherent with effective use of terminology.
1	1–2	Outline of the use of CBT lacks clarity, detail and link to schizophrenia. The limitation is generic/stated rather than explained. The answer as a whole is not clearly expressed. Terminology is either absent or inappropriately used. Either outline or limitation done well.
	0	No relevant content.

Outline

Possible content:

- challenging beliefs (including origin of ‘voices’) and reality testing to reduce distress
- use of positive self-talk
- coping strategy enhancement through education and symptom targeting
- cognitive restructuring via ABCDE framework. Identifying activating event (A), exploring beliefs (B), recognising consequences (C), disputing irrational beliefs (D), restructured belief (E).

Credit other relevant aspects of cognitive behaviour therapy.

Possible limitations:

- CBT requires self-awareness and willingness to engage with process (positive symptoms lead to lack of awareness; negative symptoms lead to reluctance/inability to engage)
- practical issues, eg length of therapy (leading to drop out at times of severe episodes)
- not all clients are suited to vigorous confrontation.

Credit other relevant limitations.

Exemplar Response

CBT can be used to help patients identify the faulty cognitive processes, challenge these and try to find ways of coping with them. The main problem is the requirement for insight.

Examiner commentary

This is a Level 1 answer. It is brief and although clear it lacks a link to schizophrenia in either the CBT or the limitation. It is a very generic answer. The limitation is stated, and is pertinent, but needs explaining, particularly with respect to schizophrenia.

Mark awarded = 2

QUESTION

24 Discuss biological explanations for schizophrenia.

[16 marks]

MARK SCHEME

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

Level	Marks	Description
4	13–16	Knowledge of biological explanations for schizophrenia is accurate and generally well detailed. Discussion is thorough and effective. The answer is clear, coherent and focused. Specialist terminology is used effectively. Minor detail and/or expansion of argument sometimes lacking.
3	9–12	Knowledge of biological explanations for schizophrenia is evident. There are occasional inaccuracies. Discussion is apparent and mostly effective. The answer is mostly clear and organised. Specialist terminology is mostly used effectively. Lacks focus in places.
2	5–8	Some knowledge of biological explanation(s) for schizophrenia is present. Focus is mainly on description. Any discussion is only partly effective. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–4	Knowledge of biological explanation(s) for schizophrenia is limited. Discussion is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology either absent or inappropriately used.
	0	No relevant content.

Possible content:

- genetic explanation – potential genetic mechanisms
- dopamine hypothesis – increased DA levels linked to symptoms of schizophrenia
- other neurotransmitters implicated, eg serotonin, acetylcholine and glutamate
- neural correlates – decreased ventricle size; reduction in temporal and frontal lobe volume
- evolutionary explanations, eg ‘shaman’ view.

Possible discussion points:

- use of evidence to support/refute, eg MZ/DZ twin studies; other concordance research, pharmacological action of effective antipsychotic drugs; MRI and fMRI scanning studies
- comparison with psychological explanations, eg family-based explanations (EE)
- value of the diathesis-stress approach
- implications, eg determinism, early identification, consequences for treatment
- reductionism – explanation at a basic cellular and chemical level and consequences of this
- issues related to diagnosis and classification as related to biological explanations.

Credit other relevant discussion points.

Only credit evaluation of the methodology used in studies when made relevant to discussion of the explanations.

Exemplar Response

One explanation for schizophrenia is genetic which suggests this disorder is passed on through the genes from parents etc. No single gene has been found and it is likely that an individual is born with a vulnerability to develop schizophrenia. This is usually investigated using twin and family studies and looking at concordance rates. For example a review study by Goatsman and Shield into severe form of schizophrenia found a concordance rate of up to 90% for identical twins suggesting genetics does play a major role. Although a criticism is that twin studies fail to untangle the effect of the shared environment – particularly relevant to identical twins.

Another biological explanation for schizophrenia is the dopamin hypothesis – too little dopamin released at the synapse has been linked to schizophrenia. Evidence for this comes from l-dope which is a drug that releases dopamin and causes symptoms in people without schizophrenia. The problem is not all people with schizophrenia have high dopamin levels so this cant be the only cause.

Examiner commentary

This is a Level 2 answer. There is knowledge of two biological explanations (genetic and the dopamine hypothesis) but these are not fully developed. The focus is mainly descriptive with some discussion, but this is fairly cursory. The answer does have clarity but there is some inaccuracy. For example, the dopamine hypothesis is concerned with too much dopamine being released (not too little). Specialist terminology is not always used accurately eg ‘dopamin’ instead of ‘dopamine; ‘l-dope’ instead of L-dopa.

Mark awarded = 6

Topic: Eating behaviour

QUESTION

25 Briefly outline the role of ghrelin in the control of eating behaviour.

[2 marks]

MARK SCHEME

Marks for this question: AO1 = 2

1 mark – ghrelin is a hormone/chemical released from stomach and small intestine into the bloodstream in relation to food intake.

Plus

1 mark – levels are lowest after a meal and then rise gradually, increasing feelings of hunger and stimulating eating behaviour.

Exemplar Response

Ghrelin is a fast acting hormone released by the stomach. Its role is to initiate eating behaviour as part of a process involved in maintaining energy levels.

Examiner commentary

This is a very good answer that focusses on the role of Ghrelin and addresses both parts of the mark scheme.

Mark awarded = 2

QUESTION

- 26 Using your knowledge of the role of learning in food preference, outline how parents might encourage their children to eat a healthy diet.

[4 marks]

MARK SCHEME

Marks for this question: AO2 = 4

Level	Marks	Description
2	3–4	Knowledge of the role of learning in food preference is clear and mostly accurate. The material is used appropriately to explain how parents might encourage a healthy diet. The answer is generally coherent with effective use of psychological terminology.
1	1–2	Some knowledge the role of learning in food preference is evident. Explanation of how parents might encourage a healthy diet is not always effective or not presented in psychological terms. The answer lacks accuracy and detail.
	0	No relevant content.

Possible content:

- social learning/culture, eg role of others (parents and peers) as models
- concepts of observation, imitation, identification, vicarious reinforcement
- although less likely also credit answers based on associative learning, eg operant conditioning and direct reinforcement; classical conditioning and pleasurable association between UCS and CS
- research evidence is creditworthy where it exemplifies a particular method.

Credit other relevant suggestions based on learning theory.

Exemplar Response

Food preference may be learned through classical conditioning. Parents could encourage a healthy diet by providing a healthy eating role model for their child to imitate. Eg eating fruit daily. It could also happen by rewarding the child each time they choose a healthy option (eg praise).

Examiner commentary

This is a Level 2 response because there is sufficient information applied to encouraging children to eat a healthy diet in the answer. However, the concept of 'classical conditioning' was stated but then not applied because the answer then illustrates the encouragement through social learning concepts. The concepts of 'role model' and 'imitation' are appropriate, as is the idea of direct reinforcement – but these are not linked to appropriate 'learning theory'. There are appropriate examples given eg eating fruit, giving praise.

Mark awarded = 3

QUESTION

27 Read the item and then answer the questions that follow.

Research has identified centres in the hypothalamus that are involved in the control of eating behaviour. Much of this research has used non-human animals, such as rats and mice.

Explain **one** limitation of using non-human animals to research the brain mechanisms of eating behaviour.

[2 marks]

MARK SCHEME

Marks for this question: AO3 = 2

1 mark for a brief explanation of a limitation (must be explained rather than stated).

Plus

1 mark for elaboration focused on the issue of brain mechanisms of feeding.

Possible limitations:

- problem of extrapolating from non-human animals to humans
- limited behavioural range of non-human animals.

Credit other relevant limitations.

Exemplar Response

One problem relates to the ability to generalise from animal findings to human behaviour/ brain mechanisms. The human brain is more complex than that of a rat. Thus we cannot assume that they work in the same way when it comes to brain functioning/feeding.

Examiner commentary

This is a full answer that explains a limitation (generalising from animal findings to human behaviour/ brain mechanisms as the human brain is more complex than that of a rat) and links to brain mechanisms of feeding.

Mark awarded = 2

Topic: Stress

QUESTION

29 With reference to hardiness, outline what is meant by 'challenge'.

[2 marks]

MARK SCHEME

Marks for this question: AO1 = 2

2 marks – accurate outline with elaboration: an aspect of hardiness that sees change positively as an opportunity for personal growth and achievement, rather than negatively as a source of stress.

1 mark – brief or muddled outline.

Exemplar Response

'Challenge' is where people look at stressful situations in terms of a challenge. They may even see the event in question as an opportunity eg to become better at something or overcome a shortcoming.

Examiner commentary

There is a bit of tautology going on in the first sentence and the answer would need to elaborate to gain full marks. It needs to add to the reference of the stressful event as 'an opportunity' - which is positive rather than negative (or similar).

Mark awarded = 1 mark

QUESTION

30 Using your knowledge of workplace stress, explain why Mike may be experiencing these stress-related symptoms.

[4 marks]

MARK SCHEME

Marks for this question: AO2 = 4

Level	Marks	Description
2	3–4	Knowledge of the effects of workload and control is clear and mostly accurate. The material is used appropriately to explain Mike's symptoms. The answer is generally coherent with effective use of terminology.
1	1–2	Some knowledge of the effects of workload and control is evident. Links to Mike's symptoms are not always effective. The answer lacks accuracy and detail. Use of terminology is either absent or inappropriate.
	0	No relevant content.

Content:

- combination of high workload and low levels of control is highly stressful
- Mike has a high workload (long hours, new tasks) therefore no control
- Mike has low control because his workload is directed by his manager
- overload leading to lack of predictability in his job.

Exemplar Response

High levels of stress at work can be caused by the environment or the processes putting undue 'strain' on an individual. This could be things like shift work, role conflict, lack of control over the days work. Mike is working long hours – a bit like shift work in some ways – giving him less time to relax. He is also having to take on extra work which he probably has no choice or control over – also relating to an unpredictable work pattern. This stress is probably causing the symptoms of sleeplessness and high blood pressure in Mike.

Examiner commentary

This is a Level 2 response. The answer covers the main points on the mark scheme – high workload, low levels of control, no choice etc. The answer refers to Mike and links to the symptoms. It is a coherent answer with effective use of terminology.

Mark awarded = 4

QUESTION

31 The Social Readjustment Rating Scale is widely used to measure stress.

Explain **one** limitation of the Social Readjustment Rating Scale.

[2 marks]

MARK SCHEME

Marks for this question: AO3 = 2

1 mark for a brief explanation of a limitation (must be explained rather than stated).

Plus

1 mark for elaboration

Possible limitations:

- does not consider individual differences in response, eg divorce or children leaving home
- illness outcomes are not clearly specified
- correlations between the SRRS scores and illness outcomes are small/non-existent
- use of retrospective questionnaire has problems of self-presentation, demand characteristics, accuracy of recall.

Credit other relevant limitations.

Exemplar Response

One problem is that major life events may not always lead to stress, thus making this measure low in validity. For many a more valid measure would be of their daily hassles.

Examiner commentary

The problem is clear (individual differences in response to stress) and elaborated with respect to validity.

Mark awarded = 2

QUESTION

32 Drug therapy, stress inoculation therapy and biofeedback are methods used to cope with stress. Discuss **two** of these methods of coping with stress.

[16 marks]

MARK SCHEME

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

Level	Marks	Description
4	13–16	Knowledge of two methods is accurate and generally well detailed. Discussion is thorough and effective. The answer is clear, coherent and focused. Specialist terminology is used effectively. Minor detail and/or expansion of argument sometimes lacking.
3	9–12	Knowledge of two methods is evident. Discussion is apparent and mostly effective. There are occasional inaccuracies. The answer is mostly clear and organised. Specialist terminology mostly used effectively. Lacks focus in places.
2	5–8	Knowledge of two methods is present but is vague/inaccurate or one method is present. Focus is mainly on description. Any discussion is only partly effective. The answer lacks clarity, accuracy and organisation in places. Specialist terminology used inappropriately on occasions.
1	1–4	Knowledge of method(s) is limited. Discussion is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology either absent or inappropriately used.
	0	No relevant content.

Possible content:

- drug therapy – biological intervention using benzodiazepines and beta-blockers; modes of action of these drugs on the brain and/or peripheral nervous system
- stress inoculation therapy – cognitive intervention in stages: conceptualisation; skills acquisition/rehearsal, eg self-instruction; application practice
- biofeedback – behavioural operant conditioning of involuntary responses through the interplay of physiology (feedback from bodily arousal) and psychology (relaxation techniques).

Possible discussion points:

- use of evidence to support effectiveness/suitability
- drugs work quickly/effectively on physiological, eg heart rate and blood pressure, but problems of side effects and dependency
- SIT addresses the perception and causes of stress and so may lead to long lasting coping but requires commitment, perseverance and insight
- biofeedback requires sophisticated technology but can lead to positive behavioural change and long lasting techniques for coping with stress
- comparison of different methods.

Credit other relevant discussion points.

Only credit evaluation of the methodology used in studies when made relevant to discussion of the methods.

Exemplar Response

In this essay I will be discussing drug therapy and stress inoculation therapy as ways of dealing with stress.

Anti-anxiety drugs such as valium are usually used for stress. These work by increasing the effect of Gaba which quietens many neurons in the brain. It slows down neural activity and makes people feel more calm. It also acts on the neurotransmitter serotonin. The problem with the use of such drugs is the side effects and you can become dependent on them so they are only for short-term use. Davidson carried out a study with a group of social anxiety patients and a control placebo group and found that the anti-anxiety drug treatment group had both a significant short and long term effect.

Due to the risk of addiction, these anti-anxiety drugs are not recommended to use for more than 4 weeks as withdrawal symptoms occur. People also quickly develop a tolerance for them. The side effects can also be quite disabling – things like unsteady legs and memory/concentration problems. So although these drugs are not costly and they are easy to take, they come with too many side effects and other problems to be considered a long term solution.

Stress-Inoculation Therapy (SIT) looks at both cognitive and emotional aspects of stress. It was developed by Michelbum and involves three stages. The first is conceptualisation which is the preparation stage when a therapist talks about the individual's stress responses and how stress is dealt with currently. The second stage is skill acquisition where the person learns some skills like relaxation or coping statements. The final stage is when the client applies the techniques in the real world. It has been found that cognitive therapies like SIT work best when combined with behavioural techniques. It is also been found that the technique works well for short-term stressors, such as public speaking, but is also effective with long-term stress such as work stress. One of the main strengths of SIT is rather than reducing stress once it has occurred, like for example drug therapy, it prepares a person for stress in real-life situations. Furthermore, Cognitive therapies do not have the negative side effects of drug therapy. Due to the complicated nature of stress it may be that the most effective approach may be eclectic, involving behaviour, cognitive and drug therapy.

Examiner commentary

This is a Level 4 response. The knowledge of the two chosen methods is accurate and although there could be some expansion in parts, given the time restrictions it is a clear and coherent answer that is sufficient to access the level 4 descriptor. There are a number of relevant discussion points and specialist terminology is generally used effectively. To gain further marks the answer would benefit from an expansion of the knowledge – particularly on drug therapy e.g. the modes of action.

Mark awarded = 13

Topic: Aggression

33 Read the item and then answer the questions that follow.

News correspondents in inner cities have remarked upon how young males frequently carry weapons and engage in threatening behaviour.

Using your knowledge of evolutionary explanations of aggression, account for these high levels of aggression in young males.

[4 marks]

MARK SCHEME

Marks for this question: AO2 = 4

Level	Marks	Description
2	3–4	Knowledge of evolutionary explanations of aggression is clear and mostly accurate. The material is used appropriately to explain levels of aggression amongst young males in inner cities. The answer is generally coherent with effective use of terminology.
1	1–2	Some knowledge of evolutionary explanations of aggression is evident. Links to high levels of aggression amongst young males in inner cities are not always effective. The answer lacks accuracy and detail. Use of terminology is either absent or inappropriate.
	0	No relevant content.

Possible content:

- male aggression derives from need to acquire/defend resources such as mates or territory (in the city) and/or to establish status (in groups of peers or between gangs)
- male aggression derives from sexual jealousy of other males who may have sex with or steal their mates.

Exemplar Response

Male aggression helps show females that the man can protect any children and this makes him more attracted to the ladies.

Examiner commentary

This is a Level 1 answer. There is a hint of evolutionary theory where the male can show his ability to protect, but there is no link to 'inner cities' and the answer is brief and limited.

Mark awarded = 1

QUESTION

34 Briefly outline and evaluate the findings of **one** research study into genetic factors in aggression.

[4 marks]

MARK SCHEME

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

Level	Marks	Description
2	3–4	Findings are clear and accurate. Evaluation is clear and coherent.
1	1–2	Findings are clear but there is no evaluation, or, findings and evaluation are both incomplete/partly accurate. For 1 mark there is some detail of findings but no evaluation.
	0	No relevant content.

Possible findings:

- outline of findings of any study of genetic factors and aggression, eg family studies on the MAOA gene
- non-human animal studies, eg breeding aggressive dogs; gene knock-out studies in mice.

Any genetic study of aggression is acceptable but do not credit studies of the role of hormones.

Possible evaluation points:

- evaluation of findings, eg analysis of implication of findings; contradictory evidence
- alternative explanations; problem of demonstrating cause and effect
- methodological issues such as the validity of extrapolating from animals to humans.

Credit other relevant evaluation points.

Exemplar Response

Brunner et al. found high levels of violent behaviour within in a Dutch family – with the male family members assaulting a sister, prison staff and so on. Similar threatening behaviour was seen in other members – totalling about 14 male family members over time.

A useful study showing the genetic link with aggressive behaviour, since four generations were involved. However, it may have become a norm to behave this way and could therefore be explained in terms of social learning theory instead.

Examiner commentary

This is a Level 2 answer. The findings from the study are a little vague, with terms like ...”and so on” “about 14 male family members”. The evaluation is clear with an expansion.

Mark awarded = 3

QUESTION

40 Briefly outline **one** method for reducing addiction **and** explain **one** limitation of this method. [4 marks]

MARK SCHEME

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

Level	Marks	Description
2	3–4	Outline of one method for reducing addiction is clear and has some detail. A limitation is clearly explained. The answer is generally coherent with effective use of terminology.
1	1–2	Outline of one method for reducing addiction lacks clarity. The limitation is generic/stated rather than explained. The answer as a whole is not clearly expressed. Terminology is either absent or inappropriately used. Either outline or limitation is done well.
	0	No relevant content.

Possible methods:

- drug therapy, eg outline of named drug and mode of action
- behavioural interventions, eg outline of specific procedures and related mechanisms involved in aversion therapy or covert sensitisation
- cognitive behaviour therapy, eg outline of stage by stage process
- theory of planned behaviour and/or Prochaska's model as used to illustrate a method.

Credit other relevant methods.

Possible limitations:

will depend on the method outlined but likely responses include:

- drug therapy – side effects and dependency issues with drugs such as methadone
- aversion therapy – ethical issues
- CBT – issues of commitment and motivation
- theory of planned behaviour and Prochaska's model are more descriptive and lack empirical support for effectiveness.

Credit other relevant limitations.

Exemplar Response

Reducing addiction- eg aversion therapy based on principles of classical conditioning.
One problem is that it tends not to be a permanent solution.

Examiner commentary

Although aversion therapy is stated it is not outlined (not even briefly) and the problem is not explained.

Mark awarded = 1

QUESTION

41 Read the item and then answer the question that follows.

Dave comes from a family of smokers. He began smoking at an early age. Now in his twenties, he has tried to stop smoking but finds it difficult, especially now that he has taken on more responsibility at work.

Briefly explain risk factors relevant to Dave's addiction to smoking.

[4 marks]

MARK SCHEME

Marks for this question: AO2 = 4

Level	Marks	Description
2	3–4	Knowledge of risk factors in addiction is clear and mostly accurate. The material is used appropriately to explain Dave's behaviour. The answer is generally coherent with effective use of terminology.
1	1–2	Some knowledge of risk factor(s) in addiction is evident. Links to Dave's behaviour are not always effective. The answer lacks accuracy and detail. Use of terminology is either absent or inappropriate.
	0	No relevant content.

Possible content:

- genetic vulnerability (Dave's family smoke)
- stress (more responsibility at work – smoking may act to reduce stress)
- family and peers (Dave may have observed and imitated the behaviour – SLT)
- awareness of the interaction of different factors, eg genetic vulnerability and stress
- personality as a risk factor, eg may lack self-efficacy as demonstrated in his failure to quit smoking.
-

Exemplar Response

Risk factors/ Dave:- If other family members smoke – genetic and/or social factors. In Dave's case – a family of smokers. Peers who smoke. If he smoked at a 'young age' it is likely that his friends did too.

Stress – more responsibility at work means

Examiner commentary

There is some appropriate knowledge of risk factors (eg genetic/stress/peers) and an attempt to link to Dave, but the answer lacks clarity and needs further explanation. For example, 'stress' due to more responsibility at work is certainly a risk factor but to answer the question the answer would need to link to smoking eg Dave might continue to smoke as he finds it reduces his stress levels at work.

Mark awarded = 2

QUESTION

42 Discuss explanations for gambling addiction.

[16 marks]

MARK SCHEME

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

Level	Marks	Description
4	13–16	Knowledge of explanations for gambling addiction is accurate and generally well detailed. Discussion is thorough and effective. The answer is clear, coherent and focused. Specialist terminology is used effectively. Minor detail and/or expansion of argument sometimes lacking.
3	9–12	Knowledge of explanations for gambling addiction is evident. Discussion is apparent and mostly effective. There are occasional inaccuracies. The answer is mostly clear and organised. Specialist terminology mostly used effectively. Lacks focus in places.
2	5–8	Knowledge of explanation(s) is present. Focus is mainly on description. Any discussion is only partly effective. The answer lacks clarity, accuracy and organisation in places. Specialist terminology used inappropriately on occasions.
1	1–4	Knowledge of explanation(s) is limited. Discussion is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology either absent or inappropriately used.
	0	No relevant content.

Possible content:

- learning theory – operant conditioning, reward and to partial reinforcement schedules,
- cognitive theory – cognitive biases, irrational thinking, overestimates of the chances of winning and underestimates of the odds against, and hindsight bias (post hoc rationalisations), cognitions and behaviour of gamblers while actually gambling, eg irrational verbalisations (“the machine hates me”).
- classical conditioning, eg association and environmental cues
- genetic factors
- role for modelling and SLT.

Credit other relevant psychological explanations.

Possible discussion points:

- use of evidence to support/refute explanations (including Skinner’s original work with rats and pigeons)
- issues of extrapolating Skinner’s findings from animals to humans
- difficulty demonstrating cause and effect in real-life gambling contexts
- some explanations apply better to some forms of gambling than others, eg conditioning can be more easily applied to gambling where reinforcement is immediate, eg scratch-cards, than where it is delayed, eg weekly lottery ticket
- learning-based explanations are environmentally determinist whereas gambling may be an innate predisposition
- comparison with alternative explanations, eg genetics or reward pathways in the brain.

Credit other relevant discussion points.

Only credit evaluation of the methodology used in studies when made relevant to discussion of the explanations.

Exemplar Response

Gamblers may have learnt to associate the excitement of a win in an early gambling experience and now want that rush of excitement again so continue to gamble. This is called classical conditioning and was first studied by Pavlov. He got dogs to salivate to the sound of a bell and used special terms like unconditioned stimulus. Below is a diagram of his study –

Unconditioned stimulus gives unconditioned response

Food	Saliva
------	--------

Food and Bell	Saliva
---------------	--------

Bell becomes	Saliva – conditioned response
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Conditioned stimulus	
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This has led to aversion therapy and people who gamble may be given a drug that makes them sick. They then come to associate gambling with feeling sick rather than winning and it becomes extinct. Obviously there are some ethics about giving people a drug that makes them sick and so psychologists would only use this as a last chance. Also, it is based on Pavlov and he studied dogs which are not the same as humans.

Examiner commentary

There is an attempt to link gambling addiction to classical conditioning, showing very limited knowledge of an appropriate explanation. The discussion regarding treatment is not relevant. There is no relevant evaluation/discussion evident. Specialist terminology (eg unconditioned stimulus) is not linked to the question on gambling. Overall, the answer lacks clarity and focus on the question set.

Mark awarded = 2