



Mark Scheme (Results)

Summer 2024

Pearson Edexcel International Advanced Level
in Psychology (WPS04) Paper 01
Clinical Psychology and Psychological Skills

Edexcel and BTEC Qualifications

Edexcel and BTEC qualifications are awarded by Pearson, the UK's largest awarding body. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information visit our qualifications websites at www.edexcel.com or www.btec.co.uk. Alternatively, you can get in touch with us using the details on our contact us page at www.edexcel.com/contactus.

Pearson: helping people progress, everywhere

Pearson aspires to be the world's leading learning company. Our aim is to help everyone progress in their lives through education. We believe in every kind of learning, for all kinds of people, wherever they are in the world. We've been involved in education for over 150 years, and by working across 70 countries, in 100 languages, we have built an international reputation for our commitment to high standards and raising achievement through innovation in education. Find out more about how we can help you and your students at: www.pearson.com/uk

Summer 2024

Question Paper Log Number P75834A

Publications Code WPS04_01_2406_MS

All the material in this publication is copyright

© Pearson Education Ltd 2024

General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

CLINICAL PSYCHOLOGY

Question Number	Answer	Mark
1(a)	<p>AO1 (1 mark)</p> <p>Credit one mark for an accurate symptom given.</p> <p>For example;</p> <ul style="list-style-type: none"> • One symptom of schizophrenia is thought insertion (1). <p>Look for other reasonable marking points.</p>	(1)

Question Number	Answer	Mark
1(b)	<p>AO1 (4 marks)</p> <p>Credit up to four marks for an accurate description.</p> <p>For example;</p> <ul style="list-style-type: none"> • High levels of dopamine in the mesolimbic pathway have been linked with the positive symptoms of schizophrenia (1). Negative symptoms such as alogia have been associated with low dopamine levels in the mesocortical pathway (1). Delusions have been connected with increased subcortical release of dopamine linked to D2 receptor sites (1). Decreased glutamate uptake at the NMDA receptor leads to reduced activation is also implicated in positive, negative, and cognitive symptoms (1). <p>Look for other reasonable marking points.</p>	(4)

Question Number	Answer	Mark
1(c)	<p>AO1 (3 marks), AO3 (3 marks)</p> <p>Credit one mark for each accurate identification point (AO1). Credit one mark for justification of each point of analysis (AO3).</p> <p>Genetics</p> <p>For example;</p> <ul style="list-style-type: none"> • There is an increased risk of developing schizophrenia if a family member has the disorder through the inheritance of genes such as the NRG-1 gene (1). Kendler et al. (1985) found that first line family members were more likely to develop schizophrenia than the general population (1). Identical twins share the same genetics and have been shown to have a higher risk of developing schizophrenia (1), with Gottesman and Shields (1972) finding a 58% concordance rate of schizophrenia in monozygotic (MZ) twins who were reared apart (1). However, there are likely to be other factors than genetics involved otherwise the concordance rate would be 100% for MZ twins who are genetically identical (1), because the NRG-1 gene has a role in the expression and activation of glutamate and a role in neurodevelopment, meaning genes may only be indicative of a predisposition to other causal factors (1). <p>Brain structure</p> <p>For example;</p> <ul style="list-style-type: none"> • Brain structural difference can explain schizophrenia, with parts of the brain being reduced in size in schizophrenic patients, for example the temporal lobe is found to be smaller (1). Evidence from Wright et al. (2000) found that people with schizophrenia had a smaller cerebral volume (98%) (1). Ventricular enlargement has been observed in patients with schizophrenia with MRI scans having shown ventricular cavities to be around 15% larger (1). Degreef et al. (1992) found ventricular enlargement in the frontal and temporal horns, with enlargement of the temporal horns associated with the presence of positive symptoms (1). However, there is an increased risk of schizophrenia if a family member has the disorder, with identical twins having a higher risk as they share the same genes (1). Kendler et al (1985) found that first line family members were more likely to develop schizophrenia than the general population, so there may be more than just brain structure involved (1). <p>Look for other reasonable marking points.</p>	(6)

Question Number	Answer	Mark
2(a)	<p style="text-align: center;">AO1 (1 mark)</p> <p>Credit one mark for an accurate statement.</p> <p>For example;</p> <ul style="list-style-type: none"> • To investigate the nutritional status of Japanese inpatients with schizophrenia (1). <p>Look for other reasonable marking points.</p>	(1)

Question Number	Answer	Mark
2(b)	<p style="text-align: center;">AO1 (2 marks)</p> <p>Credit up to two marks for an accurate description.</p> <p>For example;</p> <ul style="list-style-type: none"> • Nutritional status was measured using the total protein, total cholesterol, triglyceride level, and fasting plasma glucose levels (1) from a blood sample taken after a minimum 9 hours of fasting, for example Hypoglycaemia was measured by a fasting plasma glucose level of <70 mg/dL (1). <p>Look for other reasonable marking points.</p>	(2)

Question Number	Answer	Mark
2(c)	<p>AO1 (2 marks), AO3 (2 marks)</p> <p>Credit one mark for accurate identification of each strength (AO1). Credit one mark for justification/exemplification of each strength (AO3).</p> <p>For example:</p> <ul style="list-style-type: none">• The use of 333 real patients aged between 16 and 80 years old who had been admitted across psychiatric hospitals with a diagnosis of schizophrenia can be considered representative of Japanese inpatients (1). This increases the population validity of the findings about nutrition as the inpatients are likely to reflect the target population of schizophrenic inpatients in Japan (1).• The nine psychiatric hospitals that were used were every day, real life institutions where patients would normally be admitted for disorders such as schizophrenia (1). This increases the ecological validity of the findings about weight and nutrition as the context in which the study took place is reflective of real-life experiences and hospitalisation (1). <p>Look for other reasonable marking points.</p>	(4)

Question Number	Answer	Mark
3(a)	<p style="text-align: center;">AO2 (2 marks)</p> <p>Credit up to two marks for an appropriate description in relation to the scenario.</p> <p>For example;</p> <ul style="list-style-type: none"> • Amy could go to the therapist's office every day for a week to meet patients who would happen to be there for their appointments (1) and then ask the patients if they would be willing to take part in her interview about their experiences of cognitive behavioural therapy (CBT) (1). <p>Generic answers score 0 marks.</p> <p>Look for other reasonable marking points.</p>	(2)

Question Number	Answer	Mark
3(b)	<p style="text-align: center;">AO2 (4 marks)</p> <p>Credit up to four marks for an appropriate description in relation to the scenario.</p> <p>For example;</p> <ul style="list-style-type: none"> • First Amy would need to gain fully informed consent from any of the patients that agree to take part in her interview by explaining the aim of her research (1). Amy would have an interview schedule prepared that would include the questions about CBT she was going to ask the patients (1). She would need to plan in advance the structured closed-ended questions about CBT that she needs to use to gather quantitative data from the patients (1) and also the open ended questions to gather qualitative data, such as 'in what ways do you think CBT has helped you?' (1). <p>Generic answers score 0 marks.</p> <p>Look for other reasonable marking points.</p>	(4)

Question Number	Answer	Mark
3(c)	<p>AO2 (2 marks), AO3 (2 marks)</p> <p>Credit one mark for an accurate identification of each strength in relation to the scenario (AO2).</p> <p>Credit one mark for justification/exemplification of each strength (AO3).</p> <p>For example;</p> <ul style="list-style-type: none"> • Amy will be able to gather in-depth details from the patients having cognitive behavioural therapy to find out more information about how they feel and what they have experienced (1) which gives Amy a more holistic perspective of the effectiveness of CBT rather than oversimplified data like session attendance rates that ignores individual experiences (1). • The patients may feel able to be honest and relaxed when discussing their CBT during an interview as it allows for open conversations to take place where reassurance can be given to patients (1) which will give strong validity as the findings will reflect the real experiences and emotions of the patients own truthful beliefs about the effectiveness of their CBT (1). <p>Generic answers score 0 marks.</p> <p>Look for other reasonable marking points.</p>	(4)

Question Number	Answer	Mark
4(a)	<p style="text-align: center;">AO2 (2 marks)</p> <p>Credit up to two mark for an accurate description in relation to the scenario.</p> <p>For example;</p> <ul style="list-style-type: none"> • Rahul demonstrates a failure to function as he is unable to cope with the demands of his everyday life to take part in his usual activities or leave his house causing him suffering (1) and is also unable to cope with social events because he is fearful of meeting new people (1) <p>Generic answers score 0 marks.</p> <p>Look for other reasonable marking points.</p>	(2)

Question Number	Answer	Mark
4(b)	<p style="text-align: center;">AO2 (1 mark), AO3 (1 mark)</p> <p>Credit one mark for accurate identification of one reason in relation to the scenario (AO2).</p> <p>Credit one mark for justification/exemplification of the reason (AO3).</p> <p>For example;</p> <ul style="list-style-type: none"> • Rahul may believe his diagnosis is valid as he receives the same independent diagnosis from his psychiatrist and their trainee for his symptoms of fear and social isolation (1), as Brown et al. (2001) found that two interviews using the DSM IV criteria gave the same diagnosis of anxiety and mood disorders in 362 outpatients (1). <p>Generic answers score 0 marks.</p> <p>Look for other reasonable marking points.</p>	(2)

Question Number	Indicative Content	Mark
5	<p style="text-align: center;">AO1 (6 marks), AO3 (10 marks)</p> <p>AO1</p> <ul style="list-style-type: none"> • A patient with schizophrenia will attend counselling or therapy sessions with their family members and any designated caregivers. • Family therapy addresses environmental, social, and emotional issues of the patient with schizophrenia. • The therapy is not a physically invasive treatment programme as it is based on sharing information and feelings about schizophrenia. • Family therapy can increase family members knowledge of schizophrenia to help them understand the symptoms. • Effective family therapy usually runs alongside a drug based therapy and it is not a therapy that is usually used alone • Drug therapy consists of anti-psychotic medication which suppresses hallucinations and delusions and can be used with family therapy. <p>AO3</p> <ul style="list-style-type: none"> • Magliano et al. (2005) found improved social functioning in caregivers of family members with schizophrenia, showing success in treating the wider impact of schizophrenia on family life. • Attending family therapy can be demanding to families, such as transport, time, motivation, and energy, which may lead to high dropout rates and reduce the effectiveness of the family therapy. • Pharoah et al. (2010) found positive impacts on patient recovery, a relapse reduction and improved social functioning from family therapy. • While being less invasive than drugs or deep brain stimulation treatments, family therapy may not address the cause of schizophrenia, so only helps with the management of the patient and family life. • Psychoeducation in family therapy can increase knowledge of the illness to help families effectively support the patients' medication needs. • Kavanagh (2018) found that patients in families with high levels of negative attitudes had a 48% chance of relapse, so families would need to engage positively with therapy for it to be effective. • Bird et al. (2010) showed that family therapy in the early stage of psychosis significantly reduced relapse and readmission rates, so effectiveness may be greater if family therapy begins early. • Family therapy requires the person with schizophrenia to be able to engage and explain how it affects them which may not be effective as they may be living in a different reality where they do not trust their family. • Pilling et al. (2002) found a link between family therapy interventions and adherence to medication, which could effectively reduce relapse. • Drugs such as Chlorpromazine block dopamine receptors and patients show positive signs of improvement and a reduction in schizophrenic symptoms, so family therapy is not the only course of treatment that should be considered. <p>Look for other reasonable marking points.</p>	(16)

Level	Mark	Descriptor
AO1 (6 marks), AO3 (10 marks) Candidates must demonstrate a greater emphasis on evaluation/conclusion vs knowledge and understanding in their answer. Knowledge & understanding is capped at maximum 6 marks.		
	0	No rewardable material.
Level 1	1-4 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	5-8 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	9-12 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	13-16 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)

PSYCHOLOGICAL SKILLS

Question Number	Answer	Mark
6(a)	<p>AO2 (1 mark)</p> <p>Credit one mark for an accurate identification.</p> <ul style="list-style-type: none"> • Nominal data as she is tallying what snacks are eaten at break (1). <p>Look for other reasonable marking points.</p>	(1)

Question Number	Answer	Mark
6(b)	<p>AO2 (1 mark)</p> <p>Credit one mark for an accurate identification.</p> <ul style="list-style-type: none"> • Cake (1). <p>Look for other reasonable marking points.</p>	(1)

Question Number	Answer	Mark
6(c)	<p>AO2 (1 mark)</p> <p>Credit one mark for a correct calculation.</p> <ul style="list-style-type: none"> • 6:11 (1). <p>Look for other reasonable marking points.</p>	(1)

Question Number	Answer	Mark
6(d)	<p>AO2 (1 mark)</p> <p>Credit one mark for a correct calculation.</p> <ul style="list-style-type: none"> • 27.27% (1). <p>Look for other reasonable marking points.</p>	(1)

Question Number	Answer	Mark																																								
7(a)	<p style="text-align: center;">AO2 (4 marks)</p> <p style="text-align: center;">PLEASE CLIP WITH 7(b and c)</p> <p>Credit one mark for accurate completion of O-E column to two decimal places.</p> <p>Credit one mark for accurate completion of $(O-E)^2$ column to two decimal places.</p> <p>Credit one mark for accurate completion of $(O-E)^2/E$ column to two decimal places.</p> <p>Credit one mark for correct chi-squared to two decimal places = 1.02</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th></th> <th>Observed</th> <th>Expected</th> <th>O-E</th> <th>$(O-E)^2$</th> <th>$(O-E)^2/E$</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Males</td> <td>Ran to the platform</td> <td>41</td> <td>38.03</td> <td>2.97</td> <td>8.82</td> <td>0.23</td> </tr> <tr> <td>Did not run to the platform</td> <td>21</td> <td>23.97</td> <td>-2.97</td> <td>8.82</td> <td>0.37</td> </tr> <tr> <td rowspan="2">Females</td> <td>Ran to the platform</td> <td>51</td> <td>53.97</td> <td>-2.97</td> <td>8.82</td> <td>0.16</td> </tr> <tr> <td>Did not run to the platform</td> <td>37</td> <td>34.03</td> <td>2.97</td> <td>8.82</td> <td>0.26</td> </tr> <tr> <td colspan="5"></td><td>Chi squared =</td><td>1.02</td> </tr> </tbody> </table> <p>Look for other reasonable marking points.</p>			Observed	Expected	O-E	$(O-E)^2$	$(O-E)^2/E$	Males	Ran to the platform	41	38.03	2.97	8.82	0.23	Did not run to the platform	21	23.97	-2.97	8.82	0.37	Females	Ran to the platform	51	53.97	-2.97	8.82	0.16	Did not run to the platform	37	34.03	2.97	8.82	0.26						Chi squared =	1.02	(4)
		Observed	Expected	O-E	$(O-E)^2$	$(O-E)^2/E$																																				
Males	Ran to the platform	41	38.03	2.97	8.82	0.23																																				
	Did not run to the platform	21	23.97	-2.97	8.82	0.37																																				
Females	Ran to the platform	51	53.97	-2.97	8.82	0.16																																				
	Did not run to the platform	37	34.03	2.97	8.82	0.26																																				
					Chi squared =	1.02																																				

Question Number	Answer	Mark
7(b)	<p style="text-align: center;">AO2 (1 mark)</p> <p>Credit one mark for an accurate statement.</p> <p style="text-align: center;">PLEASE CLIP WITH 7(a and c)</p> <p>For example:</p> <ul style="list-style-type: none"> • The result is not significant at $P \leq 0.025$ for a two-tailed test where $df=1$ as the calculated value of 1.02 is less than the critical value of 5.02 (1). <p>Look for other reasonable marking points.</p>	(1)

Question Number	Answer	Mark
7(c)	<p style="text-align: center;">AO3 (1 mark)</p> <p>Credit one mark for an accurate conclusion.</p> <p style="text-align: center;">PLEASE CLIP WITH 7(a and b)</p> <p>For example:</p> <ul style="list-style-type: none"> • Jamie could conclude that there is no difference in the level of obedience shown by males and females when given an instruction (1). <p>Look for other reasonable marking points.</p>	(1)

Question Number	Answer	Mark
8(a)	<p style="text-align: center;">AO2 (2 marks)</p> <p>Credit up to two marks for an accurate description in relation to the scenario.</p> <p>For example:</p> <ul style="list-style-type: none"> • Ling could read through each of the articles looking at the information given by parents to pick out words and phrases that relate to parenting style and attachment (1) and then identify any similarities in the ideas that are commonly mentioned across all of the articles to produce a summary of links between parenting and attachment (1). <p>Generic answers score 0 marks.</p> <p>Look for other reasonable marking points.</p>	(2)

Question Number	Answer	Mark
8(b)	<p style="text-align: center;">AO2 (1 mark), AO3 (1 mark)</p> <p>Credit one mark for an accurate improvement in relation to the scenario (AO2)</p> <p>Credit one mark for exemplification/justification of the improvement (AO3)</p> <p>For example:</p> <ul style="list-style-type: none"> • Ling could use more than nine articles as her sources, for example gathering 20 articles that have been peer-reviewed and published to increase her sample size (1) which would increase validity by reducing the impact of any anomalies in the results from the articles she uses about the impact of parenting style on infant attachment (1). <p>Generic answers score 0 marks.</p> <p>Look for other reasonable marking points.</p>	(2)

Question Number	Answer	Mark
9	<p>AO2 (3 marks), AO3 (3 marks)</p> <p>Credit one mark for each accurate point identified in relation to the scenario (AO2) Credit one mark for exemplification/justification of each point (AO3)</p> <p>For example;</p> <ul style="list-style-type: none"> • Poppy would need to control for demand characteristics so that her participants did not guess that her aim was to test conformity to a majority group and behave in an unrealistic way (1). This would ensure there is construct validity in her experiment and that her line test answers were a measure of conformity and not skewed by participants changing their behaviour (1). • Control of order effects would be important with 20 trials in each experiment as participants may become bored and their answers could reflect a lack of interest rather than the effect of a majority group (1). Poppy could include distracter trials that differ from the line test so that participants have a break from the monotony of the same line task which would improve the accuracy of the results about conformity (1). • Poppy plans to replicate her experiment three times so will need to control for any extraneous variables that could confound the results gathered about conformity and group influence to ensure each replication was the same (1). This would ensure that each of the three replications of the line test is directly comparable so that Poppy's results have stronger test-retest reliability as they can be checked across her replications (1). <p>Generic answers score 0 marks.</p> <p>Look for other reasonable marking points.</p>	(6)

Question Number	Indicative Content	Mark
10	<p>AO1 (4 marks), AO2 (4 marks)</p> <p>AO1</p> <ul style="list-style-type: none">• The amygdala can be activated in stressful situations, which initiates the fight or flight responses such as fear and anger.• The prefrontal cortex regulates social behaviour and aggressive responses, and damage to the prefrontal cortex reduces the inhibition of the amygdala resulting in higher levels of aggression• The low-activity of the MAOA gene has been found to have a relationship with aggression, becoming known as the warrior gene.• Hormones such as high testosterone and low cortisol can be linked to aggressive behaviour, particularly in males. <p>AO2</p> <ul style="list-style-type: none">• Charles Whitman may not have acted on free will when he killed and wounded people due to the brain tumour affecting his amygdala, meaning legal systems should consider treatment for someone with an inability to control their aggression.• Biological theories like the pre-frontal cortex show that innate aggression may not be a choice and treatments may be better for helping violent offenders.• Although Charles Whitman was found to have a tumour, he still killed 16 people and wounded 31 others, and despite any biological factors the legal system should still punish offenders for aggressive actions such as murder.• Dabbs et al. (1995) found high levels of testosterone in violent criminals, but environmental influences can trigger the release of testosterone and people have free will and choice over whether to expose themselves to such triggers. <p>Look for other reasonable marking points.</p>	(8)

Level	Mark	Descriptor
AO1 (4 marks), AO2 (4 marks) Candidates must demonstrate an equal emphasis between knowledge and understanding vs application in their answer.		
	0	No rewardable material
Level 1	1–2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Provides little or no reference to relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2)
Level 2	3–4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Discussion is partially developed but is imbalanced or superficial occasionally supported through the application of relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2)
Level 3	5–6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning. Candidates will demonstrate a grasp of competing arguments, but discussion may be imbalanced or contain superficial material supported by applying relevant evidence from the context (scientific ideas, processes, techniques and procedures) (AO2)
Level 4	7–8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical balanced discussion, containing logical chains of reasoning. Demonstrates a thorough awareness of competing arguments supported throughout by sustained application of relevant evidence from the context (scientific ideas, processes, techniques or procedures). (AO2)

Question Number	Indicative Content	Mark
11	<p style="text-align: right;">AO1 (8 marks), AO3 (12 marks)</p> <p>AO1</p> <ul style="list-style-type: none"> Research with people has to meet the BPS Code of Ethics and Conduct (2009) so people are safe and protected from mistreatment. Human participants should not be caused distress or harm in research where there could be an alternative, such as case studies or secondary data gathering methods. Human participants have the right to withdraw themselves or their data from research that they are involved in and have their personal details kept confidential. HM would not have fully understood his role in research due to his memory failure so did not give informed consent. Milgram (1963) caused distress to participants by prompting them to continue with the electrocution task. The UNCRC Article 36 protects children from exploitation, which includes the exploitation of children for medical research which would include psychology. Animal research is governed by the Animals (Scientific Procedures) Act 1986 so it should be conducted with consideration for the animals welfare. Animal researchers now require licences to make sure that the animals are given good conditions to live in, they do not suffer and are well looked after. <p>AO3</p> <ul style="list-style-type: none"> Asch (1951) could be considered unethical as deception was used to ensure participants did not guess the aim of the study, however, at times this is necessary to obtain reliable and valid evidence. Money's (1965) case study highlights the serious implications of unethical research, where the Reimer twins were used for the benefit of the psychologist's research, which was probably not in the interest of the two children. Bowlby (1944) studied maternal deprivation in juveniles without creating any artificial conditions to cause the deprivation himself, so even sensitive research can ethically take place without causing harm and our understanding can be developed. Watson and Rayner (1920) created a situation whereby Little Albert developed a fear response to a rat, which was highly unethical as the outcome does not outweigh the poor ethical considerations given there are alternative ways to test this theory. The case study of Clive Wearing is widely published and as a result his true identity is known to broader society, so ethically fails to protect a vulnerable man with severe memory loss from people not directly involved in the research knowing his personal details. HM was studied over his entire lifetime without ever really providing fully informed consent due to his short-term memory duration, however the outcomes have given society a better understanding of the functions of human memory. Breaching guidance about harm was necessary by Milgram (1963) as without this he would not have been able to explain obedience to authority, so the distress was outweighed by the benefit to society. Ainsworth (1971) used the strange situation procedure to observe an infant with caregivers and strangers, infants often showed distress when the mother left which could be considered exploitative and unethical. Pavlov studied salivation in dogs to theorise that people and animals could be conditioned to behave in certain ways, this study caused distress to the dogs, but can be considered ethical as animals are a suitable alternative when humans cannot be used. Harlow (1958) produced unnecessary long-term effects to the emotional development of the monkeys which may have been seen as unethical due to the potential harm caused for future generations. Rats have been used to study symptoms and treatments of schizophrenia by causing brain lesioning or dopamine imbalances intentionally, this has led to successful drug treatments, so the benefit to human society outweighed the cost to animals. Skinner studied pigeons and attempted to train them to guide missiles during WWII, this is unethical as the animals would have been sent to their deaths, however during the time of war it was considered acceptable to attempt to use animals in this way. <p>Look for other reasonable marking points.</p>	(20)

Level	Mark	Descriptor
AO1 (8 marks), AO3 (12 marks)		
Candidates must demonstrate a greater emphasis on assessment/conclusion vs knowledge and understanding in their answer. Knowledge & understanding is capped at maximum 8 marks.		
	0	No rewardable material.
Level 1	1–4 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Generic assertions may be presented. Limited attempt to address the question. (AO3)
Level 2	5–8 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a generic or superficial assessment being presented. (AO3)
Level 3	9–12 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning, leading to an assessment being presented which considers a range of factors. Candidates will demonstrate understanding of competing arguments/factors but unlikely to grasp their significance. The assessment leads to a judgement but this will be imbalanced. (AO3)
Level 4	13–16 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a logical assessment, containing logical chains of reasoning throughout which consider a range of factors. Demonstrates an understanding of competing arguments/factors but does not fully consider the significance of each which in turn leads to an imbalanced judgement being presented. (AO3)
Level 5	17–20 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical assessment, containing logical chains of reasoning throughout. Demonstrates a full understanding and awareness of the significance of competing arguments/factors leading to a balanced judgement being presented. (AO3)

