



## Mark Scheme (Results)

January 2101

Pearson Edexcel International Advanced  
Level In Psychology (WPS04/01)  
Paper 1: 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](http://www.edexcel.com) or [www.btec.co.uk](http://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](http://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](http://www.pearson.com/uk)

January 2101

Publications Code WPS04\_01\_2101\_MS

All the material in this publication is copyright

© Pearson Education Ltd 2021

## CLINICAL PSYCHOLOGY

Question Number	Answer	Mark
<b>1(a)</b>	<b>AO1 (2 marks)</b>  Credit up to <b>two</b> marks for an accurate description.  For example;  <ul style="list-style-type: none"> <li>• One symptom of schizophrenia is auditory hallucinations (1) which is hearing voices that are not their own voice and do not exist (1).</li> </ul> <b>Look for other reasonable marking points.</b>	<b>(2)</b>

Question Number	Answer	Mark
<b>1(b)</b>	<b>AO1 (2 marks)</b>  Credit up to <b>two</b> marks for an accurate description.  For example;  <ul style="list-style-type: none"> <li>• One feature is that onset is most likely in your twenties (1) with male onset being early to mid-twenties, and female onset being late twenties (1).</li> </ul> <b>Look for other reasonable marking points.</b>	<b>(2)</b>

Question Number	Answer	Mark
<b>1(c)</b>	<b>AO1 (2 marks), AO3 (2 marks)</b>  Credit <b>one</b> mark for accurate identification of each strength (AO1) Credit <b>one</b> mark for justification/exemplification of the strength (AO3)  For example;  <ul style="list-style-type: none"> <li>• Patients taking drugs that increase dopamine display symptoms of schizophrenia evidencing a link between neurotransmitters and schizophrenia (1). Moskowitz et al. (1978) found that treatments for Parkinson's disease (L-dopa) that increase dopamine can result in schizophrenia symptoms (1).</li> <li>• Explanations about the role of dopamine in schizophrenia are strengthened by objective, scientific evidence using methods such as PET scans or post-mortems (1). Bird et al. (1979) found that post-mortems of schizophrenic patients showed high levels of dopamine in the brain (1).</li> </ul> <b>Look for other reasonable marking points.</b>	<b>(4)</b>

Question Number	Answer	Mark
<b>2(a)</b>	<p style="text-align: center;"><b>AO2 (1 mark)</b></p> <p><b>One</b> mark for a correct answer.</p> <ul style="list-style-type: none"> <li>• 53% (1).</li> </ul> <p><b>Reject all other answers</b></p>	<b>(1)</b>

Question Number	Answer	Mark
<b>2(b)</b>	<p style="text-align: center;"><b>AO2 (1 mark), AO3 (1 mark)</b></p> <p>Credit <b>one</b> mark for accurate identification of a strength in relation to the scenario (AO2)  Credit <b>one</b> mark for justification/exemplification of the strength (AO3)</p> <p>For example;</p> <ul style="list-style-type: none"> <li>• Using three clinicians helps reduce the effect of anomalies in diagnosis that result from clinician bias or misunderstanding of symptoms during diagnosis (1), meaning her findings about the reliability of the DSM IV and DSM V for diagnosing Anxiety Disorder have inter-rater reliability (1).</li> </ul> <p><b>Generic answers score 0 marks.</b></p> <p><b>Look for other reasonable marking points.</b></p>	<b>(2)</b>

Question Number	Answer	Mark
<b>2(c)</b>	<p style="text-align: center;"><b>AO1 (2 marks), AO3 (2 marks)</b></p> <p>Credit <b>one</b> mark for accurate identification of each reason (AO1)            Credit <b>one</b> mark for justification/exemplification of each reason (AO3)</p> <p>For example;</p> <ul style="list-style-type: none"> <li>• Brown et al. (2001) found two independent interviews using the DSM IV criteria resulted in the same diagnosis of anxiety and mood disorders in 362 outpatients (1), so diagnosis can be considered reliable when a person receives the same diagnosis by different clinicians that indicates strong inter-rater reliability of the diagnostic criteria (1).</li> <li>• Reliability has been found between different versions of the DSM when used to re-diagnose mental health disorders in patients who had a diagnosis from earlier DSM versions (1). Goldstein (1988) used the DSM III to re-diagnosed 199 patients who had been diagnosed with the DSM II and found that there was reliability between the two versions (1).</li> </ul> <p><b>Look for other reasonable marking points.</b></p>	<b>(4)</b>

Question Number	Answer	Mark
<b>2(d)</b>	<p style="text-align: center;"><b>AO1 (1 mark), AO3 (1 mark)</b></p> <p>Credit <b>one</b> mark for accurate identification of a reason (AO1)            Credit <b>one</b> mark for justification/exemplification of the reason (AO3)</p> <p>For example;</p> <ul style="list-style-type: none"> <li>• The DSM has been shown to have predictive validity where a diagnosis has been made and the expected symptoms have then been present (1). Lahey et al. (2015) studied DSM IV diagnosis of ADHD at 4 to 6 years old, where the symptoms and associated impairments persisted into elementary school (1).</li> </ul> <p><b>Look for other reasonable marking points.</b></p>	<b>(2)</b>

Question Number	Answer	Mark
3	<p style="text-align: center;"><b>A01 (2 marks), A03 (2 marks)</b></p> <p>Credit <b>one</b> mark for accurate identification of a strength and weakness (A01)  Credit <b>one</b> mark for justification/exemplification of the strength and weakness (A03)</p> <p>For example;</p> <p><b>Unipolar Depression</b></p> <p>Strength</p> <ul style="list-style-type: none"> <li>• Cognitive behavioural therapy can be used in combination with other treatments and is considered to be effective alongside SSRI's for treating unipolar depression (1). Wiles et al. (2013) found that patients undertaking CBT with anti-depressant medications saw a reduction in their unipolar depression symptoms (1).</li> </ul> <p>Weakness</p> <ul style="list-style-type: none"> <li>• Completing the homework tasks to reflect on their experiences of depression when they are away from the therapy session may be difficult for clients with depression (1) as these tasks require a motivation that the clients may not feel due to some of their symptoms, such as diminished interests in daily life (1).</li> </ul> <p><b>Anorexia Nervosa</b></p> <p>Strength</p> <ul style="list-style-type: none"> <li>• CBT can challenge negative thoughts and helps question faulty beliefs about weight and body image to develop positive self-talk about food and weight (1). Pike et al. (2003) found CBT was more effective than nutritional counselling in improving outcome and preventing relapse in anorexia nervosa (1).</li> </ul> <p>Weakness</p> <ul style="list-style-type: none"> <li>• CBT may not address other influences in the onset of anorexia nervosa, for example the impact of external factors such as role models in the media (1). Becker et al. (2002) found that television influenced views about body shape and/or weight which CBT may not consider when addressing cognitive processes (1).</li> </ul> <p><b>Look for other reasonable marking points.</b></p>	<b>(4)</b>

Question Number	Answer	Mark
<b>4(a)</b>	<p style="text-align: center;"><b>AO1 (1 mark)</b></p> <p>Credit <b>one</b> mark for stating an accurate feature.</p> <p>For example;</p> <ul style="list-style-type: none"> <li>• A CAT scan uses X-rays to produce images of the brain (1).</li> </ul> <p><b>Look for other reasonable marking points.</b></p>	<b>(1)</b>

Question Number	Answer	Mark
<b>4(b)</b>	<p style="text-align: center;"><b>AO2 (1 mark), AO3 (1 mark)</b></p> <p>Credit <b>one</b> mark for accurate identification of a strength in relation to the scenario (AO2). Credit <b>one</b> mark for justification/exemplification of the strength (AO3)</p> <p>For example;</p> <ul style="list-style-type: none"> <li>• A CAT scan will provide objective images of the brain structures of the control group and patients with schizophrenia (1) so that Michael can empirically compare the images to look for differences in schizophrenic brain structures (1).</li> </ul> <p><b>Generic answers score 0 marks.</b></p> <p><b>Look for other reasonable marking points.</b></p>	<b>(2)</b>

Question Number	Answer	Mark
<b>4(c)</b>	<p style="text-align: center;"><b>AO2 (1 mark), AO3 (1 mark)</b></p> <p>Credit <b>one</b> mark for accurate identification of a weakness in relation to the scenario (AO2). Credit <b>one</b> mark for justification/exemplification of the weakness (AO3)</p> <p>For example;</p> <ul style="list-style-type: none"> <li>• A CAT scan will only provide structural images of 'slices' of the brains of the control group and patients with schizophrenia (1) so Michael cannot see the functioning of brain regions which may limit the conclusions he makes about brain differences between the schizophrenic and control group (1).</li> </ul> <p><b>Generic answers score 0 marks.</b></p> <p><b>Look for other reasonable marking points.</b></p>	<b>(2)</b>

Question Number	Answer	Mark
<p><b>5</b></p>	<p style="text-align: center;"><b>A01 (3 marks), A03 (3 marks)</b></p> <p>Credit <b>one</b> mark for accurate identification of each point related to reliability and validity (AO1)            Credit <b>one</b> mark for justification of each point of analysis (AO3)</p> <p>For example;</p> <ul style="list-style-type: none"> <li>• Height and bodyweight were measured to calculate BMI to gather an objective measure of underweight status as it is calculated based on physical evidence (1) which increases the reliability of the study as it can be replicated to retest the underweight levels of schizophrenic inpatients (1). Suzuki et al. (2014) controlled for physical illness or changes in drug therapy by removing those inpatients from the study (1) which may not represent a true range of inpatients with schizophrenia and limit the validity of the results (1). The findings of high levels of underweight in schizophrenic inpatients are consistent with results from previous research (1) for example Kitabayashi et al. (2006) who found 16.1% of schizophrenic patients in Japan were underweight, making the study reliability (1).</li> </ul> <p><b>Look for other reasonable marking points.</b></p>	<p><b>(6)</b></p>

Question Number	Indicative Content	Mark
6	<p style="text-align: center;"><b>AO1 (6 marks), AO3 (10 marks)</b></p> <p><b>AO1</b></p> <ul style="list-style-type: none"> <li>• Cultural issues reflect the norms and values of different people and lifestyles that can account for how behaviours are viewed by others.</li> <li>• There are cultural differences in how disorders are perceived, for some religious groups hearing voices is a sign of speaking to god.</li> <li>• Cultural ideals and values can result in a greater likelihood of a particular disorder, such as anorexia nervosa.</li> <li>• The DSM contains clearly defined mental health disorders with specific diagnostic features and symptoms that can be used in all English speaking countries.</li> <li>• Clinicians may view symptoms with an ethnocentric bias from their own cultural norms when diagnosing mental health disorders.</li> <li>• The DSM V includes culture-related diagnostic issues and formulation which outlines how cultural context must be considered.</li> </ul> <p><b>AO3</b></p> <ul style="list-style-type: none"> <li>• Cooper et al. (1972) found New York psychiatrists twice as likely to diagnose schizophrenia than London psychiatrists, when shown the same video-taped clinical interviews, suggesting cultural difference.</li> <li>• López and Núñez (1987) argued that the sets of diagnostic criteria and interview schedules for schizophrenic, affective, and personality disorders at that point in time paid little attention to cultural factors.</li> <li>• Lin and Cheung (1999) claimed that due to Asian traditions of viewing the body and mind as unitary, patients tend to focus more on physical discomforts than emotional symptoms, leading to an overrepresentation of somatic complaints.</li> <li>• Cultures view mental health differently, the Plains Indians may claim to hear dead relatives speak to them and consider this normal but in North America this would be a symptom of schizophrenia.</li> <li>• Luhrmann et al. (2015) found that in some cultures hearing voices was a negative experience while in others it is a positive experience so culture may determine your experience of mental health.</li> <li>• Lee (2006) found that using the DSM in Korea for diagnosis of ADHD was as valid as using it in the USA so cultural differences had no impact on diagnosis.</li> <li>• Malgady et al. (1987) found linguistic and cultural differences in diagnosis, with clinicians of non-Hispanic origin rating symptoms as of Hispanic people less severe than Hispanic clinicians would do.</li> <li>• Chadda (1995) found that patients reporting symptoms of the culturally specific disorder 'Dhat' were found to meet the criteria for an unspecific emotional disorder in the DSM IIIR as there was no criteria for 'Dhat' as a disorder in its own right.</li> <li>• Eating disorders such as bulimia nervosa are more prevalent in western culture (up to 7.3% females) than in non-western cultures (up to 3.2% females), so culture affects more than just the diagnosis (Makino et al., 2004).</li> <li>• Littlewood and Lipsedge (1997) suggested that Black and Irish people in Britain are more likely to receive a diagnosis of serious mental disorder due to bias in diagnosis.</li> </ul> <p><b>Look for other reasonable marking points.</b></p>	<b>(16)</b>

Level	Mark	Descriptor
<b>AO1 (6 marks), AO3 (10 marks)</b> <b>Candidates must demonstrate a greater emphasis on evaluation/conclusion vs knowledge and understanding in their answer.</b> <b>Knowledge &amp; understanding is capped at maximum 6 marks.</b>		
	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
<b>7(a)</b>	<b>AO2 (4 marks)</b>  Credit up to <b>four</b> marks for an accurate description in relation to the scenario.  For example;  <ul style="list-style-type: none"> <li>• Ross would decide on the number of children he requires in each age group from 4 years old to 18 years old (1), and could include an equal number of boys and girls for each age group from each school (1). Ross will need to split the names of the school pupils into boys and girls for each age of the two groups (1) so he can then randomly draw the children's names from a hat for each sample group of 4 year olds and 18 year olds (1).</li> </ul> <p><b>Generic answers score 0 marks.</b></p> <p><b>Look for other reasonable marking points.</b></p>	<b>(4)</b>

Question Number	Answer	Mark
<b>7(b)</b>	<b>AO2 (1 mark), AO3 (1 mark)</b>  Credit <b>one</b> mark for accurate identification of a reason in relation to the scenario (AO2) Credit <b>one</b> mark for justification/exemplification of reason (AO3)  For example;  <ul style="list-style-type: none"> <li>• This technique allows Ross to find out the children's understanding of right and wrong at each age group (1) to be able to make comparisons in the changes and development of morality over time as the children get older (1).</li> </ul> <p><b>Generic answers score 0 marks.</b></p> <p><b>Look for other reasonable marking points.</b></p>	<b>(2)</b>

Question Number	Answer	Mark
<b>7(c)</b>	<p style="text-align: center;"><b>A02 (1 mark), A03 (1 mark)</b></p> <p>Credit <b>one</b> mark for accurate identification of strength in relation to the scenario (A02)            Credit <b>one</b> mark for justification/exemplification of strength (A03)</p> <p>For example;</p> <ul style="list-style-type: none"> <li>Ross can use the same questions and scenarios with every child across the age ranges so he can compare their responses (1) which gives him more reliable data to show the changes in understanding of right and wrong in the children (1).</li> </ul> <p><b>Generic answers score 0 marks.</b></p> <p><b>Look for other reasonable marking points.</b></p>	<b>(2)</b>

Question Number	Answer	Mark
<b>8(a)</b>	<p style="text-align: center;"><b>A02 (1 mark)</b></p> <p>Credit <b>one</b> mark for accurate identification in relation to the scenario.</p> <p>For example;</p> <ul style="list-style-type: none"> <li>Whether the man is wearing a business suit or casual clothing (1).</li> </ul> <p><b>Generic answers score 0 marks.</b></p> <p><b>Look for other reasonable marking points.</b></p>	<b>(1)</b>

Question Number	Answer	Mark
<b>8(b)</b>	<p style="text-align: center;"><b>A02 (1 mark)</b></p> <p>Credit <b>one</b> mark for an accurate statement in relation to the scenario.</p> <p>For example;</p> <ul style="list-style-type: none"> <li>Independent groups design (1).</li> </ul> <p><b>Look for other reasonable marking points.</b></p>	<b>(1)</b>

Question Number	Answer	Mark
<b>8(c)</b>	<p style="text-align: center;"><b>AO2 (1 mark)</b></p> <p>Credit <b>one</b> mark for correct calculation of the ratio.</p> <p>For example;</p> <ul style="list-style-type: none"> <li>• 3:2 (1).</li> </ul> <p><b>Reject all other answers.</b></p>	<b>(1)</b>

Question Number	Answer	Mark
<b>8(d)</b>	<p style="text-align: center;"><b>AO2 (2 marks)</b></p> <p>Credit up to <b>two</b> marks for an accurate description in relation to the scenario.</p> <p>For example:</p> <ul style="list-style-type: none"> <li>• He would use a bar chart as the data for obeying and disobeying in each condition is discrete/unrelated data (1) with the x-axis showing the conditions of obedience and the y-axis showing the number of participants (1).</li> </ul> <p><b>Look for other reasonable marking points.</b></p>	<b>(2)</b>

Question Number	Answer	Mark																																								
<b>8(e)</b>	<p style="text-align: center;"><b>AO2 (4 marks)</b></p> <p>Credit <b>one</b> mark for accurate completion of <b>O-E</b> column to two decimal places            Credit <b>one</b> mark for accurate completion of <b>(O-E)<sup>2</sup></b> column two decimal places            Credit <b>one</b> mark for accurate completion of <b>(O-E)<sup>2</sup>/E</b> column to two decimal places            Credit <b>one</b> mark for correct <b>chi-squared</b> to <b>two</b> decimal places = <b>19.46</b></p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th colspan="2"></th> <th>Observed</th> <th>Expected</th> <th>O-E</th> <th>(O-E)<sup>2</sup></th> <th>(O-E)<sup>2</sup>/E</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Condition A Man wearing a business suit.</td> <td>Obeyed</td> <td>25</td> <td>16.50</td> <td>8.50</td> <td>72.25</td> <td>4.38</td> </tr> <tr> <td>Disobeyed</td> <td>5</td> <td>13.50</td> <td>-8.50</td> <td>72.25</td> <td>5.35</td> </tr> <tr> <td rowspan="2">Condition B Man wearing casual clothing.</td> <td>Obeyed</td> <td>8</td> <td>16.50</td> <td>-8.50</td> <td>72.25</td> <td>4.38</td> </tr> <tr> <td>Disobeyed</td> <td>22</td> <td>13.50</td> <td>8.50</td> <td>72.25</td> <td>5.35</td> </tr> <tr> <td colspan="4"></td> <td>Chi-squared =</td> <td colspan="2">19.46</td> </tr> </tbody> </table> <p><b>Look for other reasonable marking points.</b></p>			Observed	Expected	O-E	(O-E) <sup>2</sup>	(O-E) <sup>2</sup> /E	Condition A Man wearing a business suit.	Obeyed	25	16.50	8.50	72.25	4.38	Disobeyed	5	13.50	-8.50	72.25	5.35	Condition B Man wearing casual clothing.	Obeyed	8	16.50	-8.50	72.25	4.38	Disobeyed	22	13.50	8.50	72.25	5.35					Chi-squared =	19.46		<b>(2)</b>
		Observed	Expected	O-E	(O-E) <sup>2</sup>	(O-E) <sup>2</sup> /E																																				
Condition A Man wearing a business suit.	Obeyed	25	16.50	8.50	72.25	4.38																																				
	Disobeyed	5	13.50	-8.50	72.25	5.35																																				
Condition B Man wearing casual clothing.	Obeyed	8	16.50	-8.50	72.25	4.38																																				
	Disobeyed	22	13.50	8.50	72.25	5.35																																				
				Chi-squared =	19.46																																					

Question Number	Answer	Mark
<b>8(f)</b>	<p style="text-align: center;"><b>AO3 (1 mark)</b></p> <p>Credit <b>one</b> mark for correctly using data to justify significance.</p> <p>For example:</p> <ul style="list-style-type: none"> <li>The calculated value of 19.46 exceeds the critical value of 2.71 so the difference is significant (1).</li> </ul> <p><b>Look for other reasonable marking points.</b></p>	<b>(1)</b>

Question Number	Answer	Mark
<b>8(g)</b>	<p style="text-align: center;"><b>A02 (1 mark), A03 (1 mark)</b></p> <p>Credit <b>one</b> mark for accurate identification of an improvement in relation to the scenario (A02). Credit <b>one</b> mark for justification/exemplification of the improvement (A03)</p> <p>For example:</p> <ul style="list-style-type: none"><li>• Sigmund could use a more realistic context than a classroom in a university, such as a real office (1) as this would be more reflective of day-to-day obedience when asked to delete laptop computer contents (1).</li></ul> <p><b>Generic answers score 0 marks.</b></p> <p><b>Look for other reasonable marking points.</b></p>	<b>(2)</b>

Question Number	Indicative Content	Mark
9	<p style="text-align: center;"><b>AO1 (4 marks), AO2 (4 marks)</b></p> <p><b>AO1</b></p> <ul style="list-style-type: none"> <li>Negative attitudes to mental health can result in stigma attached to a person who has a mental health condition.</li> <li>Individuals may be excluded from full involvement in society as a result of marginalisation when mental health is misunderstood.</li> <li>Mental health conditions such as schizophrenia may have a biological basis so symptoms are treatable with drug therapy.</li> <li>Cultural differences in the perception of mental health can influence whether individuals are excluded or included from society.</li> </ul> <p><b>AO2</b></p> <ul style="list-style-type: none"> <li>The concerns found by Biggs et al. (2010) show how wider social stigma should be addressed to challenge employer negativity.</li> <li>A 3.3% reduction in schizophrenic patients being employed shows increasing marginalisation from employment rather than a reduction.</li> <li>Issues of trust and needing supervision can be reduced when individuals have effective treatments for mental health conditions.</li> <li>Raising awareness in the workplace through campaigns can change employer and colleague negative attitudes and reduce exclusion.</li> </ul> <p><b>Look for other reasonable marking points.</b></p>	(8)

Level	Mark	Descriptor
<b>AO1 (4 marks), AO2 (4 marks)</b>		
<b>Candidates must demonstrate an equal emphasis between knowledge and understanding vs application in their answer.</b>		
	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
10	<p style="text-align: center;"><b>A01 (8 marks), A02 (4 marks), A03 (8 marks)</b></p> <p><b>A01</b></p> <ul style="list-style-type: none"> <li>• Positive reinforcement is when a desired consequence is received which encourages behaviour to be repeated.</li> <li>• Negative reinforcement is when an undesired consequence is taken away from the individual which encourages behaviour to be repeated.</li> <li>• The dopamine reward pathway is stimulated when individuals perform rewarding actions and they may feel pleasure from those actions.</li> <li>• Blocking glutamate at the NMDA receptor can result in psycho-stimulation, resulting in symptoms of psychosis similar to schizophrenia.</li> <li>• Social learning theory claims that individuals observe the behaviours of others whom they see as role models due to status or a position of importance to the person.</li> <li>• Individuals imitate role model behaviour which would suggest behaviour is learned from the people around us.</li> <li>• The pre-frontal cortex (PFC) plays a roles in self-control, including regulating emotions and having an inhibitory control of behaviours.</li> <li>• Personality has been linked to the PFC, with damage or dysfunction in the PFC resulting in personality changes.</li> </ul> <p><b>A02</b></p> <ul style="list-style-type: none"> <li>• Addictions such as gambling may result in positive reinforcement for the individual, such as winning money, which encourages gambling behaviour to continue.</li> <li>• The dopamine reward pathway may be stimulated by drug taking which may be harmful to the individual but become addictive due to the 'high' that is experienced.</li> <li>• Individuals may observe role models in the media smoking or drinking alcohol and retain these behaviours, reproducing them and developing an addiction.</li> <li>• Dysfunction in the PFC may explain why individuals with addictions do not seem to have control over their addictive behaviours, even if they know they are harmful.</li> </ul> <p><b>A03</b></p> <ul style="list-style-type: none"> <li>• Skinner (1948) found repetitive behaviours could be conditioned in pigeons through reinforcement and punishment, which may explain the habits of addictive actions.</li> <li>• Operant conditioning is deterministic, assuming reinforcement is sufficient to learn behaviour and ignores individual differences that may lead to addiction, such as peer group pressure or cultural norms.</li> <li>• Lahti et al. (1995) found that Ketamine blocks NMDA receptors, resulting feelings of euphoria and psychotic effects which may be a desired consequence leading to continued drug misuse.</li> <li>• It is difficult to determine cause and effect, excessive dopamine activity may be the result of addictive behaviour rather than the cause, so the argument is circular and may not fully explain addictive behaviour.</li> <li>• Bandura, Ross and Ross (1961) found that children were susceptible to imitating the role model behaviour of adults, which can explain the development behaviours that become addictive through forms of motivation that reinforce continuation.</li> <li>• Moselhy et al. (2001) reviewed evidence from neuropsychological studies and found there are specific deficits in alcoholism that suggest frontal lobe dysfunction, which could be an effect of prolonged alcohol use rather than a causal factor in misuse.</li> <li>• Neuroplasticity may account for differences in the PFC of addicts, these may be as a result of actions rather than PFC functioning being an initial cause of addictive actions.</li> <li>• Much research in learning theories and biological psychology has been conducted on animals which may not fully represent the complexities of human addictive behaviours.</li> </ul> <p><b>Look for other reasonable marking points.</b></p>	<b>(20)</b>

Level	Mark	Descriptor
<b>AO1 (8 marks), AO2 (4 marks), AO3 (8 marks)</b> <b>Candidates must demonstrate an equal emphasis between knowledge and understanding vs judgement/conclusion in their answer.</b> <b>Application to the scenario is capped at maximum 4 marks.</b>		
	0	No rewardable material.
Level 1	1–4 Marks	<p>Demonstrates isolated elements of knowledge and understanding. (AO1)</p> <p>Provides little or no reference to relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2)</p> <p>A judgement/decision may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)</p>
Level 2	5–8 Marks	<p>Demonstrates mostly accurate knowledge and understanding. (AO1)</p> <p>Line(s) of argument occasionally supported through the application of relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2)</p> <p>Candidates will produce statements with some development in the form of mostly accurate and relevant factual material leading to a judgement/decision being presented. Candidates will demonstrate a grasp of competing arguments but response may be imbalanced. (AO3)</p>
Level 3	9–12 Marks	<p>Demonstrates accurate knowledge and understanding. (AO1)</p> <p>Line(s) of argument supported by applying relevant evidence from the context (scientific ideas, processes, techniques and procedures). Might demonstrate the ability to integrate and synthesise relevant knowledge. (AO2)</p> <p>Displays a mostly developed and logical argument, containing mostly coherent chains of reasoning. Demonstrates an awareness of competing arguments, presenting a judgement/decision which may be imbalanced. (AO3)</p>
Level 4	13–16 Marks	<p>Demonstrates accurate and thorough knowledge and understanding. (AO1)</p> <p>Line(s) of argument supported throughout by sustained application of relevant evidence from the context (scientific ideas, processes, techniques or procedures). Demonstrates throughout the skills of integrating and synthesising relevant knowledge with consistent linkages to psychological concepts and/or ideas. (AO2)</p> <p>Displays a well-developed and logical argument, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments and presents a balanced response, leading to a balanced judgement/decision. (AO3)</p>
Level 5	17–20 Marks	<p>Demonstrates accurate and comprehensive knowledge and understanding. (AO1)</p> <p>Line(s) of argument supported throughout by sustained application of relevant evidence from the context (scientific ideas, processes, techniques or procedures). Demonstrates consistently the skills of integrating and synthesising relevant knowledge with thorough, accurate linkages to psychological concepts and/or ideas. (AO2)</p> <p>Displays a well-developed and logical argument, containing logical chains of reasoning throughout. Demonstrates a full awareness of competing arguments and presents a fully balanced response, leading to an effective nuanced and balanced judgement/decision. (AO3)</p>