



A-Level Psychology

7182/2 Psychology In Context (New)
Final Mark Scheme

7182
June 2017

Version/Stage: v1.0

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

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

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

Level of response marking instructions

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

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

Step 1 Determine a level

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

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

Step 2 Determine a mark

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

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

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

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

Section A

Approaches in Psychology

0	1
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Explain why John's genotype will **not** reveal whether he will suffer from Alzheimer's disease.

[4 marks]

Marks for this question: AO2 = 4

Level	Marks	Description
2	3 - 4	Explanation is clear and coherent, showing sound understanding of genotype and phenotype/environmental factor. The material is applied appropriately. There is effective use of terminology.
1	1 - 2	The explanation shows some understanding of genotype and phenotype/environmental factor. Application is not always appropriate. The answer lacks clarity and coherence. Use of terminology is either absent or inappropriate.
	0	No relevant content

Possible content:

- the genetic test reveals the genotype not the phenotype
- John's genotype will only reveal his set of genes (not their interaction with the environment)
- a genetic test will only reveal if he is predisposed to suffering Alzheimer's disease but will not reveal whether he will develop/suffer from the disorder
- environmental factors may contribute to the disorder (it depends on an interaction between inherited factors and the environment).

Credit other relevant material.

Note: merely defining genotype and/or phenotype is not creditworthy.

0 2

Describe the structure of the personality according to the psychodynamic approach.
[4 marks]

Marks for this question: AO1 = 4

Level	Marks	Description
2	3 - 4	Knowledge of the structure of personality according to the psychodynamic approach is clear and mostly accurate. There is effective use of terminology.
1	1 - 2	Knowledge of the structure of personality according to the psychodynamic approach is incomplete/partly accurate. For 1 mark there may be very limited knowledge of the structure of personality or all 3 components may be simply named. Use of terminology is either absent or inappropriate.
	0	No relevant content

Possible content:

- personality is made up of 3 parts; the id, ego and superego. **This point is essential for 4 marks.**
- elaboration regarding the components
 - the id: Focuses on self (selfish), irrational and emotional, deals with feelings and needs, seeks pleasure/hedonistic (reference to 'pleasure principle'), formed from birth-18mo, unconscious part of the mind
 - the ego: Rational, balancing the id and superego, reference to 'reality principle', formed between 18mo-3yrs, conscious part of the mind
 - the superego: Reference to 'morality principle', acts as the conscience or moral guide, based on parental and societal values, formed between 3-6yrs, unconscious part of the mind
- elaboration regarding the dynamic nature of the three components
- experience/conflicts in childhood shape the development of the 3 parts affecting how a person behaves
- description of the levels of consciousness

Credit structural descriptions of personality according to other psychodynamic theorists.

0 3

Outline and evaluate the humanistic approach. Refer to Tatiana's behaviour in your answer.

[16 marks]

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

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

Possible content:

- Maslow's hierarchy of needs – motivation to achieve progression through the levels
- Rogers' focus on the concept of self and self-acceptance
- Incongruence between self-concept and ideal self leading to negative feelings of self-worth
- person-centred approach to therapy - client led
- self-actualisation – fulfilling one's potential
- unconditional positive regard rather than setting conditions of worth

Possible application:

- hierarchy of needs: Tatiana requires her mobile phone to meet her safety needs, 'feel safe', love and belonging needs, 'socially isolated without her phone', 'feels good about herself when she receives messages or comments on social media', self-esteem needs, 'low self-esteem'/'feels good about herself when she receives messages or comments'
- self-actualisation – 'achievement at school'
- conditions of worth linked to feeling the need to text friends and use social media for acceptance and friendship
- incongruence and negative feelings of self-worth applied to 'low self-esteem'/'feels good about herself when she receives messages or comments' and/or anxiety.

Possible evaluation:

- limited application of the humanistic approach due to its abstract concepts
- the humanistic approach is not reductionist which may improve validity
- humanistic approach lacks empirical evidence to support its claims
- consideration of influence eg. counselling, theoretical influence etc.
- discussion regarding whether behaviour is due to free will or environmental factors
- credit use of evidence to discuss the different explanations when made relevant to the stem
- comparison with alternative approaches in terms of evaluation and/or application.

Credit other relevant material.

Section B**Biopsychology****0 4**

Explain the process of synaptic transmission.

[4 marks]**Marks for this question: AO1 = 4**

Level	Marks	Description
2	3 – 4	Knowledge of the process of synaptic transmission is detailed, clear and mostly accurate with use of appropriate scientific terminology.
1	1 – 2	Knowledge of the process of synaptic transmission is incomplete/partly accurate. Scientific terminology is either absent or inappropriately used.
	0	No relevant content

Possible content:

- electrical impulses (action potentials) reach the presynaptic terminal
- electrical impulses (action potentials) trigger release of neurotransmitters (or named example)
- neurotransmitters cross the synapse from vesicles
- neurotransmitters combine with receptors on the postsynaptic membrane
- stimulation of postsynaptic receptors by neurotransmitters result in either excitation (depolarisation) or inhibition (hyperpolarisation) of the postsynaptic membrane.

Credit other relevant material (eg labelled diagram – direction of transmission should be made clear).

Note: for 4 marks explanation must describe the complete process (beginning, middle and end).

0 5

Using your knowledge of the functions of Broca's area and the motor cortex, describe the problems that Lotta's grandmother is likely to experience.

[4 marks]**Marks for this question: AO2 = 4**

Level	Marks	Description
2	3 – 4	Knowledge of the functions of Broca's area and the motor cortex is clear and mostly accurate. The material is applied appropriately. The answer is generally coherent with effective use of terminology.
1	1 - 2	Some knowledge of the functions of Broca's area and/or the motor cortex is evident. Application is not always appropriate. The answer lacks accuracy and detail. Use of terminology is either absent or inappropriate.
	0	No relevant content

Possible content:

- as a consequence of damage to Broca's area, Lotta's grandmother is likely to suffer from language/speech problems (Broca's aphasia)
- it will affect her language production (but not her understanding)
- Lotta's grandmother will only be able to talk in short meaningful sentences which take great effort
- speech lacks fluency/difficulty with certain words which help sentences function (e.g. 'it' and 'the')
- as a consequence of damage to the motor cortex, Lotta's grandmother is likely to suffer from loss of muscle function/paralysis
- motor impairments on the **right** side of the body. **This point is essential for 4 marks.**

Credit other relevant material e.g. description of limited impairment due to bilateral language areas in the brains of left-handed patients

Maximum **2 marks** for answers which only address one area of the brain or do not refer to the stem.

Note: reference to difficulties understanding speech, creating made up words or talking nonsense should **not** be credited as this is referring to damage to Wernicke's area.

0 6

Using your knowledge of plasticity and functional recovery of the brain after trauma, explain why Lotta might be wrong.

[4 marks]**Marks for this question: AO2 = 4**

Level	Marks	Description
2	3 – 4	Knowledge of plasticity/functional recovery of the brain after trauma is clear and mostly accurate. The material is applied appropriately. The answer is generally coherent with effective use of terminology.
1	1 - 2	Some knowledge of plasticity/functional recovery of the brain after trauma is evident. Application is not always appropriate. The answer lacks accuracy and detail. Use of terminology is either absent or inappropriate.
	0	No relevant content

Possible content:

- Lotta's grandmother might still be capable of functional reorganisation/plasticity
- functional compensation by other undamaged areas
- although she is older her brain might still be able to form new connections (axons and dendrites) between neurons
- neuronal loss may be compensated for by regeneration (axon sprouting)
- denervation supersensitivity to reduce the severity/extent of Lotta's grandmother's impairment
- plasticity allows the brain to cope better with 'indirect' effects of brain damage resulting from inadequate blood supply following a stroke
- references to increased brain stimulation of the opposite hemisphere, physiotherapy, etc to enhance Lotta's grandmother's recovery
- reference to relevant studies on plasticity, eg suggesting women recover quicker than men would be an effective way to illustrate key points, if directly linked to Lotta's grandmother's recovery.

Credit other relevant material.

Note: not all the above are necessary for full marks.

0	7
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A researcher wants to investigate the effectiveness of physiotherapy in the recovery of stroke patients with brain damage. Carers of stroke patients will be sent questionnaires to produce quantitative data.

Explain **one** disadvantage of obtaining quantitative data in this study.

[2 marks]

Marks for this question: AO2 = 2

1 mark for an accurate, relevant disadvantage of quantitative data eg lacks detail (which may decrease validity of findings) etc.

Plus

1 mark for clear application regarding the negative impact of using quantitative data in this study (such as rating a patient's improvement).

0	8
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Write **one** question that could be used in the researcher's questionnaire to produce quantitative data and **one** question that could be used in the researcher's questionnaire to produce qualitative data.

[2 marks]

Marks for this question: AO2 = 2

1 mark for an appropriate question which produces quantitative data, eg 'On average how many hours of physiotherapy does the patient receive per week?'

Plus

1 mark for an appropriate question which produces qualitative data, eg 'How does physiotherapy help your patients?'

Note: can accept relevant items that are not phrased as questions, eg describe... or rate....

0 9Outline and evaluate **one or more** ways of studying the brain.**[8 marks]****Marks for this question: AO1 = 3 and AO3 = 5**

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

Possible content:

Candidates are most likely to describe the techniques described on the specification (outlined below) but examiners should be aware of other methods candidates may use such as lesion studies or CAT/PET scans.

- fMRI – Uses magnetic field and radio waves to monitor blood flow; it measures the change in the energy released by haemoglobin, reflecting activity of the brain (oxygen consumption) to give a moving picture of the brain; activity in regions of interest can be compared during a base line task and during a specific activity
- EEGs – electrodes are put on the scalp and detect neuronal activity directly below where they are placed; differing numbers of electrodes can be used depending on focus of the research
- ERPs – electrodes are put on the scalp and detect neuronal activity (directly below where they are placed) in response to a stimulus introduced by the researcher
- post-mortem examinations – brain is examined after death to try and correlate structural abnormalities/damage to behaviour.

Possible evaluation:

- fMRI captures dynamic brain activity as opposed to MRI/post-mortem examinations which purely show physiology
- interpretation of fMRI is complex and is affected by temporal resolution, biased interpretation and by the baseline task used
- fMRI research is expensive leading to reduced sample sizes which negatively impact the validity of the research
- EEGs and ERPs are cheaper so can be more widely used in research
- EEGs and ERPs have poor spatial resolution
- post-mortem examinations may lack validity due to small sample sizes (as special permission needs to be granted) and also due to neuronal changes during and after death
- advantages of investigating brain activity in humans rather than generalising from animal lesion/single electrode recording studies (for validity and ethical reasons)
- comparisons between techniques is an effective source of evaluation marks
- research studies are creditworthy as long as they are effectively used to evaluate the technique(s) described.

Credit other relevant material.

Section C

Research Methods

1 0

Identify the type of experiment used in this study. Shade **one** box only.

- A** Laboratory
- B** Natural
- C** Quasi
- D** Research

[1 mark]

Marks for this question: AO2 = 1

A

1 1

Identify the operationalised dependent variable in this study.

[2 marks]

Marks for this question: AO2 = 2

2 marks for identification of the operationalised dependent variable: running time in seconds/time in seconds taken to run.

1 mark for dependent variable not operationalised: time in seconds; running time.

0 marks for incorrect reference to speed or to the IV.

1	2
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Explain why a histogram would **not** be an appropriate way of displaying the means shown in **Table 1**.

[2 marks]

Marks for this question: AO2 = 2

1 mark for explaining **either** you need to have continuous data **or** scores for each participant in order to draw a histogram.

Plus

1 mark for identifying that the data represents two separate conditions (with music/without music). Accept categorical/nominal.

Note: credit can be given for two separate conditions if the student explains clearly why this would make a histogram “inappropriate”.

1	3
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Name a more appropriate graph to display the means shown in **Table 1**. Suggest appropriate X (horizontal) and Y (vertical) axis labels for your graph choice.

[3 marks]

Marks for this question: AO3 = 3

1 mark for each bullet point:

- a bar chart
- appropriate X-axis label eg ‘With or without music’; ‘Auditory Condition’, etc.
- appropriate Y-axis label eg ‘Mean/Average (400m) time in seconds’.

Note: these are independently awarded marks, eg candidates can achieve 2 marks for correctly labelled axes despite an incorrect graph type.

Note: axis labels are interchangeable.

1	4
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What do the mean and standard deviation values in **Table 1** suggest about the participants' performances with and without music? Justify your answer.

[4 marks]

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

Mean:

1 mark for interpreting what the mean times suggest about the effect of music on the participants' 400m performance - participants run faster with music (take less time to run 400 metres) or participants run more slowly without music (take more time to run 400 metres). Accept alternative wording.

Plus

1 mark for an accurate justification about the difference in the mean scores in each condition – mean time is greater in condition A than condition B (or mean time is lower in condition B than condition A).

Standard deviation:

1 mark for an accurate comment about what the standard deviations suggest about the spread of scores in each condition – performance is more consistent in condition A than condition B (or performance is less consistent in condition B than condition A). Accept alternative wording.

Plus

1 mark for a justification about the difference between the standard deviations in each condition – standard deviation is smaller in condition A than in condition B (or standard deviation is greater in condition B than condition A).

Note: **0 marks** for just stating the data from the table, eg the mean time with music is 117 whereas it is 123 without music.

1	5
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Calculate the percentage decrease in the mean time it took participants to run 400 metres when listening to music. Show your workings. Give your answer to three significant figures.

[4 marks]

Marks for this question: AO2 = 4

Marks are for calculations and/or numerical answer – no need to show unit (%)

4 marks for the correct answer given to three significant figures: 4.88 (even if no correct workings are shown).

3 marks for correct answer **not** given to three significant figures eg 4.878 or 4.9.

2 marks if incorrect answer is provided even if all working is correct.

1 mark if incorrect answer and workings are partially correct eg one or two of the correct steps.

0 marks if the incorrect answer is given to three significant figures.

Correct workings:

$$123 - 117 = 6$$

$$6 \div 123 = 0.048780$$

$$0.048780 \times 100 = 4.878$$

$$\text{Answer} = 4.88$$

Note: alternative methods used for working may be creditworthy.

1 6

The researcher used a directional hypothesis and analysed the data using a related t-test. The calculated value of t where degrees of freedom (df) = 9 was 1.4377. He decided to use the 5% level of significance.

Give **three** reasons why the researcher used a related t-test in this study and, using **Table 2**, explain whether or not the results are significant.

[5 marks]**Marks for this question: AO2 = 5****1 mark** for each bullet point:

A t-test is an appropriate choice of test for this data because

- a difference between the two sets of data is predicted
- the data is of interval/ratio level
- a repeated measures design has been used.

Credit other appropriate reasons e.g. reasons related to possible normal distribution, power of the test.

Plus**1 mark** for each bullet point:

- the result is not significant (at the 5% level)
- because the calculated value of t (1.4377) is less than the critical/table value of t, which is 1.833 (at 0.05, for a directional hypothesis where df is 9).

1 7

What is meant by a Type II error? Explain why psychologists normally use the 5% level of significance in their research.

[3 marks]**Marks for this question: AO1 = 3****2 marks** for a clear and coherent definition of a Type II error.

A Type II error would occur where a real difference in the data is overlooked as it is wrongly accepted as being not significant, accepting the null hypothesis in error (a false negative).

1 mark for a limited or incomplete definition of a Type II error.**Plus****1 mark** for a reason for why the 5% level of significance is used in psychological research.

The 5% level is used as it strikes a balance between the risk of making the Type I and II errors (or similar).

1	8
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Identify **one** extraneous variable that could have affected the results of this study. Suggest why it would have been important to control this extraneous variable and how it could have been controlled in this study.

[3 marks]

Marks for this question: AO2 = 2 and AO3 = 1

1 mark for identification of **one** appropriate extraneous variable eg type/rhythm of music/equipment/environmental variables.

Note - participant variables only acceptable if feasibly could have changed in a week eg illness/hydration level/injury/etc.

Plus

1 mark for an explanation of why it is important to control their chosen variable in the context of this study ie the impact on the DV.

Plus

1 mark for how the stated variable could be controlled.

1 9

Describe the process and purposes of peer review.

[6 marks]**Marks for this question: AO1 = 6**

Level	Marks	Description
3	5 – 6	Knowledge of the process and purposes of peer review is clear and generally accurate. Specialist terminology is used appropriately.
2	3 – 4	Some knowledge of the process and/or purposes of peer review but there may be some omissions/lack of clarity. There is some appropriate use of specialist terminology.
1	1 – 2	Knowledge of the process and/or purposes of peer review is present but there may be serious omissions and/or inaccuracy. Specialist terminology is either missing or inappropriately used.
	0	No relevant content

Possible content:**Process**

- other psychologists check the research report before deciding whether it could be published
- independent scrutiny by other psychologists working in a similar field
- work is considered in terms of its validity, significance and originality
- assessment of the appropriateness of the methods and designs used
- reviewer can accept the manuscript as it is, accept with revisions, suggest the author makes revisions and re-submits or reject without the possibility of re-submission
- editor makes the final decision whether to accept or reject the research report based on the reviewers' comments/recommendations
- research proposals are submitted to panel and assessed for merit.

Purposes

- to ensure quality and relevance of research, eg methodology, data analysis etc
- to ensure accuracy of findings
- to evaluate proposed designs (in terms of aims, quality and value of the research) for research funding.

Credit other relevant material.

2	0
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Explain why it is more appropriate for the psychologist to use an observation than a questionnaire in this case.

[3 marks]

Marks for this question: AO2 = 3

3 marks for a clear, coherent and fully elaborated explanation

2 marks for an explanation with some elaboration

1 mark for a limited or muddled explanation

Content

An observation would be more appropriate because a self-report method like a questionnaire would lead to socially desirable answers/lying/self-delusion/misremembering, so would not reflect what really happens at the gym, so the data would lack validity.
(Accept alternative wording.)

Note: responses which are inappropriate for the scenario are not creditworthy.

2 1

Design an observational study to investigate how people spend their time at the gym.

In your answer you will be awarded credit for providing appropriate details of:

- type of observation with justification
- operationalised behavioural categories
- use of time and/or event sampling with justification
- how reliability of data collection could be assessed.

[12 marks]

Marks for this question: AO2 = 6 and AO3 = 6

Level	Marks	Description
4	10 – 12	Suggestions are generally well detailed and practical, showing sound understanding of observational techniques. All four elements are presented appropriately. Justifications are appropriate. The answer is clear and coherent. Specialist terminology is used effectively. Minor detail and/or explanation sometimes lacking.
3	7 – 9	Suggestions are mostly sensible and practical, showing some understanding of observational techniques. At least three elements are presented appropriately. There is some appropriate justification. The answer is mostly clear and well organised. Specialist terminology is mostly used effectively.
2	4 – 6	Some suggestions are appropriate but others are impractical or inadequately explained. At least two elements are presented appropriately. Justifications are partial or muddled. The answer lacks clarity, accuracy and organisation on occasions.
1	1 – 3	At least one element is addressed but knowledge of observational techniques is limited. Justifications are absent. The whole answer lacks clarity, has many inaccuracies and is poorly organised.
	0	No relevant content.

Four elements of design to be credited:

- **Type of observation with justification** – eg covert or overt, naturalistic, participant or non-participant and why
- **Operationalised behavioural categories** – detail of at least two specific and observable behaviours to be recorded. This must go beyond the idea of global constructs such as exercising, socialising, use of other facilities
- **Use of time and/or event sampling with justification** – recordings can take place at specified time intervals (time sampling) eg every minute or as the behaviour occurs (event sampling) eg number of times interaction occurs with another gym member. The type(s) of sampling must be appropriate for the behaviours chosen

- **How reliability of the data collection could be assessed**, inter-observer reliability eg using two observers/raters and comparing separate recordings; statistical comparison (correlation) of data from both observers/raters, intra-observer reliability eg checking video recordings.

Note: test-retest is not creditworthy but repeated observation of a video recording is creditworthy.

Assessment Objective Grid				
	AO1	AO2	AO3	Total
Section A				
1		4		4
2	4			4
3	6	4	6	16
Total	10	8	6	24
Section B				
4	4			4
5		4		4
6		4		4
7		2		2
8		2		2
9	3		5	8
Total	7	12	5	24
Section C				
10		1		1
11		2		2
12		2		2
13			3	3
14		2	2	4
15		4		4
16		5		5
17	3			3
18		2	1	3
19	6			6
20		3		3
21		6	6	12
Total	9	27	12	48
Paper Total	26	47	23	96