

AQA A-LEVEL PSYCHOLOGY • 7182

PSYCHOLOGY



EXAM QUESTION PACK

3.1.4 CHARACTERISTICS OF DISORDERS

SCORE

/48

PERCENTAGE

%

STEMUP

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Q1.

A researcher studying depression wanted to see whether or not there was a relationship between level of self-esteem and negative schema score. She constructed two questionnaires and asked ten people who had been diagnosed with depression to complete them.

One questionnaire measured the participant's level of self-esteem. A low score (out of 50) indicated low self-esteem.

The other questionnaire measured whether the participant showed evidence of negative schema. A low score (out of 50) indicated evidence of negative schema. The two sets of results for each participant are shown in the table below.

Table 1 - Self-esteem score and negative schema score for each patient

Participant	1	2	3	4	5	6	7	8	9	10
Self-esteem score	8	9	9	11	13	17	18	18	20	22
Negative schema score	11	15	13	18	12	14	20	16	17	19

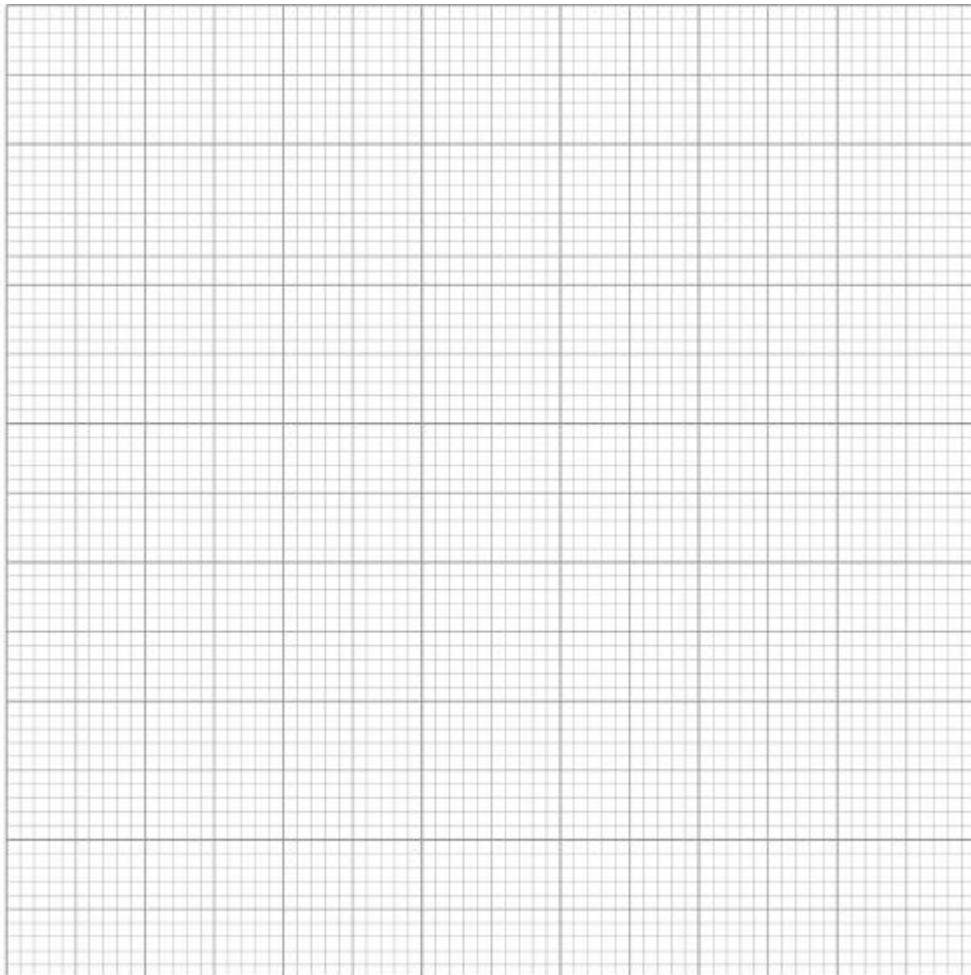
- (a) Is negative schema score best described as measuring a cognitive, emotional or behavioural characteristic of depression? Shade **one** box only.

- A** Cognitive ☐
- B** Emotional ☐
- C** Behavioural ☐

(1)

- (b) Draw a suitable graphical display to represent the data in **Table 1**. Label your graph appropriately.

Title: _____



(4)

The researcher analysed the data in **Table 1** using a Spearman's rho statistical test.

- (c) With reference to level of measurement, explain why Spearman's rho is an appropriate statistical test for this data.

(2)

- (d) Estimate the correlation coefficient most likely to result from analysis of the data in **Table 1**. Shade **one** box only.

The correlation coefficient would be approximately

+0.95

☐

+0.70

☐

+0.30

☐



(1)
(Total 8 marks)

Q2.

Bob always checks that doors are locked and plug sockets are switched off. His checking routine has become very time consuming. He now feels overwhelmed with fears that his family could be in danger if he does not complete his checking routine. His doctor thinks Bob has obsessive compulsive disorder.

- (a) Explain what is meant by 'obsessions' and 'compulsions'. Refer to Bob in your answer.

(4)

- (b) Bob's doctor is sending him for a brain scan and is looking into his family history.

How might the biological approach be used to explain Bob's obsessive-compulsive disorder?

(4)

(Total 8 marks)

Q3.

Which **two** of the following are cognitive characteristics of obsessive compulsive disorder (OCD)?

Choose **two** from the options **A, B, C, D** and **E**.

- | | | |
|----------|--|--------------------------|
| A | Awareness that behaviour is irrational | ☐ |
| B | Compulsions | ☐ |
| C | Disgust | ☐ |
| D | High anxiety | ☐ |
| E | Obsessions | ☐ |

(Total 2 marks)

Q4.

Outline **one** behavioural and **one** cognitive characteristic of obsessive-compulsive disorder (OCD).

(Total 4 marks)

Q5.

Which **two** of the following are cognitive characteristics of depression? Choose **two** from the options **A, B, C, D** and **E**.

- | | | |
|----------|-------------------------------|--------------------------|
| A | A change in sleeping patterns | ☐ |
| B | Negative schema | ☐ |
| C | Poor concentration | ☐ |
| D | Low mood | ☐ |
| E | Aggression | ☐ |

(Total 2 marks)

Q6.

Outline the characteristics of depression.

(Total 4 marks)

Q7.

Outline the characteristics of obsessive compulsive disorder.

(Total 4 marks)

Q8.

What is meant by a *phobia*?

(Total 2 marks)

Q9.

A researcher wanted to investigate the effectiveness of therapy as a treatment for obsessive-compulsive disorder in children. Before the therapy started, the mothers of 10 children with obsessive-compulsive disorder each rated the anxiety of their child. They used a rating scale of 1–10, where 1 meant not at all anxious and 10 meant extremely anxious. Each child then attended a programme of therapy. At the end of the programme, each mother rated her child again, using the same anxiety scale. The scores for each child before and after therapy were used to calculate a median anxiety rating.

The data are shown in the table below.

Median ratings of children's anxiety before and after therapy

	Before therapy	After therapy
Median rating of anxiety	8.5	4.0

(a) Identify **two** symptoms of obsessive-compulsive disorder.

(2)

(b) Name and outline the experimental design used in this study.

(2)

(c) Explain **one** advantage of this experimental design.

(2)

(Total 6 marks)

Q10.

Outline characteristics of **either** phobic disorders **or** obsessive compulsive disorder.

(Total 4 marks)

Q11.

Outline characteristics of depression.

(Total 4 marks)

Mark schemes

Q1.

(a) [AO2 = 1]

1 mark for:
A Cognitive

1

(b) [AO2 = 4]

1 mark for each of the following:

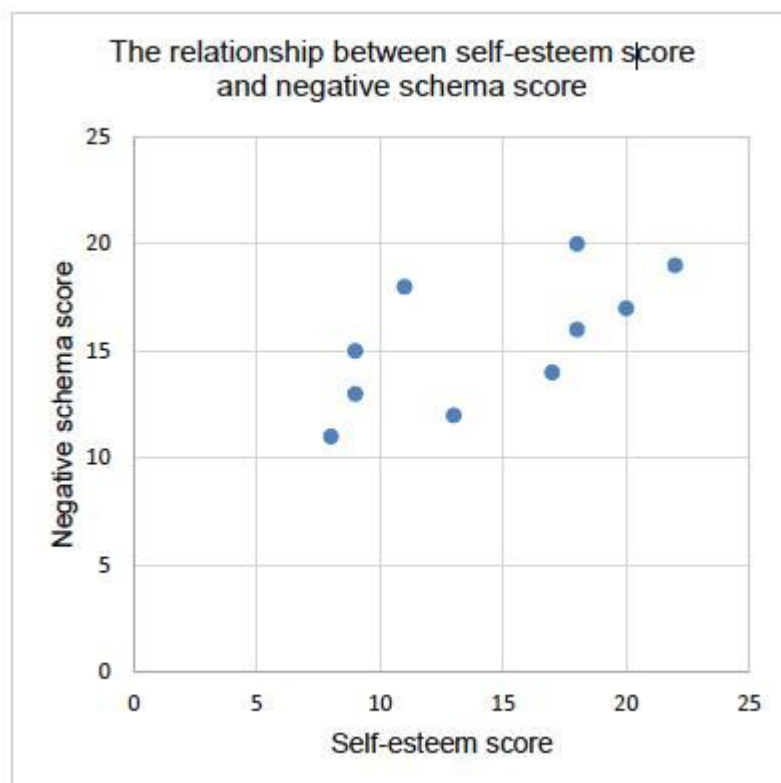
- a title that includes both co-variables and reference to correlation / relationship
- appropriately labelled X axis
- appropriately labelled Y axis
- accurately plotted points

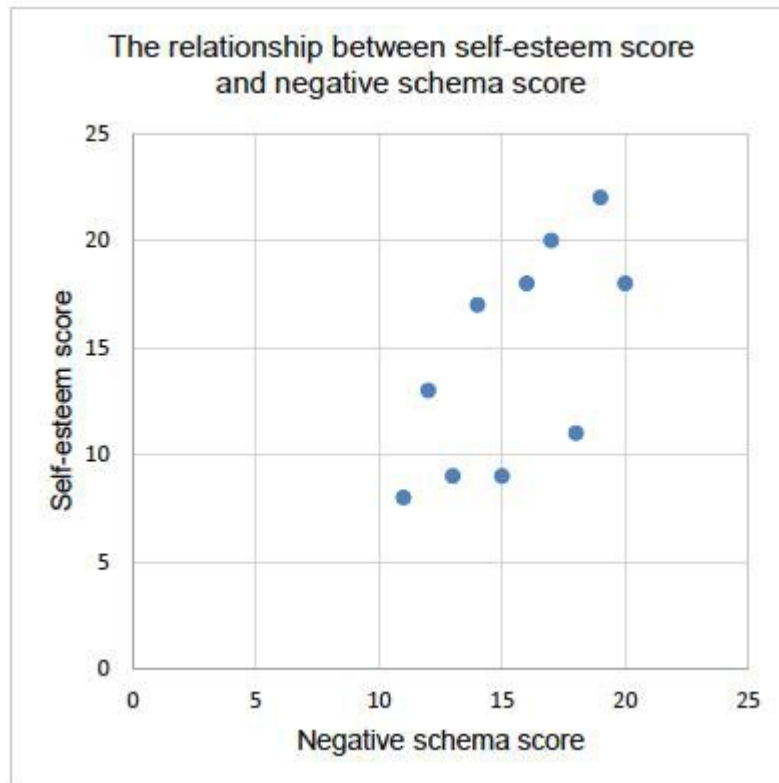
Note: co-variables should be operationalised ('score') either in the title or on the axes.

Accept: line of best fit.

Do not accept: points connected by lines (e.g. frequency polygon); this is an inappropriate graphical display, so maximum 1 mark for Title (bullet 1 above).

If maximum 1 for Title, Title does not need to include 'score'. Must include both co-variables and reference to correlation / relationship.





4

(c) [AO2 = 2]

1 mark for stating that the level of measurement is ordinal data.

PLUS

1 mark for an explanation:

Possible content:

- the co-variables (self-esteem and negative schema) have been measured using an 'unsafe' nonstandardised scale / the researcher constructed the scales herself
- the co-variables cannot be measured objectively / mathematically / may not be 'real things'
- because units of measurement are not of equal size / of unknown size

Accept alternative wording.

2

(d) [AO2 = 1]

+0.70.

1

[8]

Q2.

(a) [AO1 = 2 AO2 = 2]

1 mark for a definition of obsessions – obsessions are intrusive/recurring/unwanted thoughts

1 mark for a definition of compulsions – compulsions are repetitive behaviours/acts.

1 mark for application of knowledge of obsessions to the scenario – Bob is overwhelmed by fear that his family will be in danger due to him.

1 mark for application of knowledge of compulsions to the scenario – Bob checks that doors are locked or plug sockets switched off before he can leave the house.

(b) [AO2 = 4]

Level	Marks	Description
2	3 – 4	There is a clear knowledge of biological explanation(s) for OCD with some accurate detail. Application is effective. The answer is generally coherent with effective use of appropriate terminology.
1	1 – 2	There is limited or partial knowledge of biological explanation(s) for OCD with some detail. Application is limited or absent. The answer lacks coherence and use of appropriate terminology.
	0	No relevant content.

Possible content:

Neural explanations (neurochemical and neurophysiological) – Bob is having a scan.

- The basal ganglia and other circuits have been implicated suggesting that disturbed communication in these structures might account for the repetitive behaviours seen in Bob's OCD. Also, OCD linked to abnormality/excessive activity in the orbital frontal cortex/thalamus; abnormal functioning of the parahippocampal gyrus – related to the regulation of unpleasant emotions.
- Low levels of neurotransmitters, eg serotonin - serotonin might be removed too quickly before impulses have passed.

Genetic explanations – Bob's family history is being looked at

- Focus on the search for gene markers that Bob might have inherited – gene 9, COMT, SERT.
- Family studies indicate a higher percentage of first degree relatives, ie Bob's parents, have this disorder – 10% compared to the prevalence rate of 2%.

Accept other relevant information.

Q3.

[AO1 = 2]

A and E

Q4.

[AO1 = 4]

Level	Marks	Description
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2	3 – 4	There is a clear and detailed outline of a relevant behavioural and cognitive characteristic of obsessive-compulsive disorder (OCD). The answer is generally coherent with effective use of appropriate terminology.
1	1 – 2	There is a vague /muddled outline of a relevant behavioural and cognitive characteristic of obsessive-compulsive disorder (OCD). The answer lacks coherence and use of appropriate terminology. Either behavioural or cognitive only at Level 2.
	0	No relevant content.

Possible content:

- Behavioural characteristic – this is the compulsion element of the disorder, where a behaviour is performed repeatedly in order to alleviate anxiety
- Cognitive characteristic – this is the obsessive element of the disorder, where the sufferer experiences unwanted/intrusive thoughts or images that cause distress

Credit other relevant characteristics eg avoidance (behavioural)

Q5.

[AO1 = 2]

B and C

Q6.

Please note that the AOs for the new AQA Specification (Sept 2015 onwards) have changed. Under the new Specification the following system of AOs applies:

- AO1 knowledge and understanding
- AO2 application (of psychological knowledge)
- AO3 evaluation, analysis, interpretation.

Although the essential content for this mark scheme remains the same, mark schemes for the new AQA Specification (Sept 2015 onwards) take a different format as follows:

- A single set of numbered levels (formerly bands) to cover all skills
- Content appears as a bulleted list
- No IDA expectation in A Level essays, however, credit for references to issues, debates and approaches where relevant.

Note that candidates can legitimately cover unipolar and/or bipolar depression for this question.

AO1 = 4

AO1 credit is awarded for an outline of the characteristics of depression.

It is acceptable for candidates to cover major depressive disorder or bipolar disorder.

Depression is characterised by a range of symptoms and candidates could refer to

emotional, cognitive (suicidal thoughts) physical (weight loss or gain) or behavioural symptoms (decrease in sexual activity). A diagnosis of MDD can be made when five symptoms are present for at least two weeks.

To achieve top band marks at least one of two 'core' symptoms should be present:

- depressed mood for most of the day
- diminished interest or pleasure in activities.

Epidemiology i.e. prevalence, gender differences, prognosis etc., are creditworthy.

AO1 Mark bands	Knowledge and understanding
4 marks Sound	Knowledge and understanding are accurate and well detailed. Organisation and structure of the answer are coherent.
3 marks Reasonable	Knowledge and understanding are generally accurate and reasonably detailed. Organisation and structure of the answer are reasonably coherent.
2 marks Basic	Knowledge and understanding are basic / relatively superficial. Organisation and structure of the answer are basic.
1 mark Rudimentary	Knowledge and understanding are rudimentary and may be very brief, muddled and / or inaccurate. Lacks organisation and structure.
0 marks	No creditworthy material.

Q7.

Please note that the AOs for the new AQA Specification (Sept 2015 onwards) have changed. Under the new Specification the following system of AOs applies:

- AO1 knowledge and understanding
- AO2 application (of psychological knowledge)
- AO3 evaluation, analysis, interpretation.

Although the essential content for this mark scheme remains the same, mark schemes for the new AQA Specification (Sept 2015 onwards) take a different format as follows:

- A single set of numbered levels (formerly bands) to cover all skills
- Content appears as a bulleted list
- No IDA expectation in A Level essays, however, credit for references to issues, debates and approaches where relevant.

AO1 = 4

AO1 credit is awarded for an outline of the characteristics of OCD. The main diagnostic criteria include:

- the presence of obsessions (recurrent, persistent thoughts, impulses or images) and / or compulsions (repetitive behaviours that the person feels driven to perform) on most days for a period of two weeks or more
- obsessions & compulsions are repetitive and unpleasant and interfere with daily life.

For 4 marks, students should refer to both obsessions and compulsions. Examiners should be mindful of the time constraints when awarding credit.

AO1 Mark bands
4 marks Sound Knowledge and understanding are accurate and well detailed. Organisation and structure of the answer are coherent.
3 marks Reasonable Knowledge and understanding are generally accurate and reasonably detailed. Organisation and structure of the answer are reasonably coherent.
2 marks Basic Knowledge and understanding are basic / relatively superficial. Organisation and structure of the answer are basic.
1 mark Rudimentary Knowledge and understanding are rudimentary and may be very brief, muddled and / or inaccurate. Lacks organisation and structure.
0 marks No creditworthy material.

Q8.

[AO1 = 2]

Up to 2 marks for a description of features of a phobia.

Likely points:

An extreme fear of an object / situation / activity (1)

An irrational fear (1)

Fear that is disproportionate (to the actual danger) (1)

A fear that leads to avoidance (1)

A fear that is disruptive to everyday life / maladaptive (1)

For two marks there must be some reference to fear.

Q9.

Please note that the AOs for the new AQA Specification (Sept 2015 onwards) have changed. Under the new Specification the following system of AOs applies:

- AO1 knowledge and understanding
- AO2 application (of psychological knowledge)
- AO3 evaluation, analysis, interpretation.

(a) **[AO1 = 2]**

Up to 2 marks for description of both obsessions – recurrent / persistent

thoughts / ideas / images / impulses and compulsions – repetitive behaviours / ritual acts / behaviour that reduces anxiety.
Accept physiological symptoms of anxiety.

(b) **[AO3 = 2]**

1 mark for naming repeated measures design.

1 further mark for an elaboration of repeated measures design.

Possible answers:

Repeated measures design means that the same participants are used in both conditions of the study.

If the answer is related to the study described: This means that the children whose anxiety ratings are taken in the before therapy condition are the same children as those who provide the anxiety ratings for the after therapy condition.

(c) **[AO3 = 2]**

Up to 2 marks for an explanation of one advantage of using repeated measures design.

The advantage of repeated measures design (in this study) is that there will be no participant variables (1) so any differences in performance (the median anxiety ratings before and after therapy) are more likely to be due to the manipulated variables / variables under test (therapy programme) than other variables so the validity of the results is increased.

Answers based on the idea that fewer participants are required than in other designs are relevant.

Note:

If the answer to (b) is incorrect **full credit** can be awarded for (c) if the advantage given matches the experimental design identified in the answer to (b).

Q10.

Please note that the AOs for the new AQA Specification (Sept 2015 onwards) have changed. Under the new Specification the following system of AOs applies:

- AO1 knowledge and understanding
- AO2 application (of psychological knowledge)
- AO3 evaluation, analysis, interpretation.

Although the essential content for this mark scheme remains the same, mark schemes for the new AQA Specification (Sept 2015 onwards) take a different format as follows:

- A single set of numbered levels (formerly bands) to cover all skills
- Content appears as a bulleted list
- No IDA expectation in A Level essays, however, credit for references to issues, debates and approaches where relevant.

AO1 = 4

The outline might include:

- physiological, behavioural, emotional and cognitive signs / symptoms
- incidence and prevalence

- course and prognosis.

Examiners should be mindful that this part of the question is only worth 5 marks and so candidates are not expected to cover all these points to access the top marks. However, top band answers should refer to some diagnostic criteria – in particular there must be some reference to the underlying anxiety that characterises these anxiety disorders. It is acceptable to refer to different types of phobia but these distinctions on their own are not credit-worthy – they must be accompanied by a description of the characteristics of each type.

AO1 Mark bands
4 marks Outline is accurate and coherent.
3 – 2 marks Outline is limited, generally accurate and reasonably coherent
1 mark Outline is weak and muddled or very limited
0 marks No creditworthy material

Q11.

AO1 = 4

- physiological, behavioural, emotional and cognitive signs / symptoms
- incidence and prevalence
- course and prognosis
- criteria for diagnosis.

Examiners should be mindful that this part of the question is only worth 4 marks and so candidates are not expected to cover all these points to access the top marks. However, they do have to refer to diagnostic criteria, specifically some reference to the core symptom of low mood / sadness. It is acceptable to refer to types of depression such as endogenous or reactive but these distinctions on their own are not credit-worthy – they must be accompanied by a description of the characteristics of each type.

AO1 Mark bands
4 marks Outline is reasonably thorough, accurate and coherent.
3 – 2 marks Outline is limited, generally accurate and reasonably coherent.
1 mark Outline is weak and muddled or very limited.
0 marks

No creditworthy material.

Examiner reports

Q1.

Part (a) was very straightforward and answered very well.

In part (b) many students were able to provide appropriate scattergrams, with accurate title, axes, and plotting. Others missed out on one or two marks with vague titles and / or axes. However some students, despite the questions in this section mentioning 'relationship', Spearman's rho and 'correlation', provided completely inappropriate graphical displays e.g. histograms and bar charts. A small minority did not attempt this question at all.

Part (c) required reference to 'level of measurement'. Although the majority of answers could identify ordinal data for 1 mark, very few went on to characterise ordinal data or why this study produced ordinal data, which would have fully justified the use of Spearman's rho.

Part (d) was very straightforward if the scattergram was plotted accurately, but a significant minority of students were clearly unaware that 0.15 is a negligible correlation and 0.95 a virtually perfect correlation (straight line).

Q2.

- (a) Where students clearly understood what was meant by obsessions and compulsions, there were some excellent answers provided, which gained full marks. However, it was disappointing to see a significant minority who did not understand the terms or who had muddled obsessions and compulsions. Knowledge of the terms was sometimes incomplete, which limited the number of marks awarded. For example, some students simply referred to obsessions as 'thoughts' without the addition of some other relevant descriptor (eg 'intrusive') and others referred to compulsions as 'behaviours/acts' without the 'repetitive' aspect. The application to 'Bob' was often accurate and clear where students had a clear understanding of obsessions and compulsions. However, those who muddled the terms also tended to also muddle the application and thus didn't get the marks.
- (b) There were excellent responses from some students who provided clear and detailed knowledge of biological explanations of OCD, which were effectively applied to 'Bob'. Superb detailed knowledge was seen in some students' answers relating to the COMT/SERT genes and the role of the orbital frontal cortex. A variety of biological explanations were given with genetic explanations being the most common but typically these responses tended to be less detailed than those answers that focussed on the neural aspect.

Unfortunately, a minority of students produced accurate and detailed knowledge of biological explanations but had no application in their response, thereby limiting marks to level 1. Most students demonstrated some knowledge of biological explanations of OCD and thus most gained some marks but a minority simply wrote generic answers about genes and inheritance without explicit links to OCD.

Q3.

This was a multiple choice Question where the answers were A and E. This was done reasonably well, but it was clear that a minority of students had not read the question carefully and had missed the key word, 'cognitive'.

Q6.

This option was attempted by around 25% of students.

This question required students to outline the characteristic of depression. Some students presented a wealth of material, often far in excess of the 4 marks available. Most students focused on unipolar depression but a small number chose to cover bi-polar disorder in addition providing an impressive amount of detail on both.

Q7.

In this question, students were required to outline the characteristics of OCD. Most students tackled this question well, making appropriate reference to both obsessions and compulsions and providing details of frequency.

Q8.

This was generally very well answered; although some students described symptoms of a phobia, most were able to access both marks.

Q9.

- (a) Two symptoms of obsessive-compulsive disorder were accurately described by many – typically, and predictably, the ‘obsessions’ and the ‘compulsions’; though physiological symptoms of anxiety were also deemed creditworthy. Some students gave symptoms that did not adequately distinguish OCD from other disorders, such as ‘irrational thinking’.
- (b) Many students could identify the correct experimental design used in the study but fewer could provide an appropriate outline. A considerable number, however, thought the design was ‘independent groups’ or even ‘matched pairs’. Finally, ‘quasi-experiment’ was an often seen answer.
- (c) The advantage of ‘repeated measures’ was often stated rather than explained, for instance, ‘no participant variables’ was frequently offered without elaboration. Better, fuller answers tended to be those based on the time and cost-saving benefits of using the same participants twice in comparison to alternative designs. It was possible to gain two marks if the answer in part (c) could be matched to that in part (b), therefore, many students scored full marks in this question for an advantage of independent groups having named it above.

Q10.

Candidates were well prepared for this question and there were some excellent, accurate answers. Most candidates were able to include the obvious characteristic of anxiety and how it is an essential part of these disorders.

Q11.

Candidates seemed well prepared for this question and there were some excellent, accurate answers. Some candidates missed out the most obvious characteristic of “sad mood” or failed to give any indication of the severity of symptoms.