

1

Read the item and then answer the questions that follow.

Louise comes from a family with a history of schizophrenia, as both her grandfather and an aunt have been diagnosed with the disorder. Louise's father has recently died from cancer and she has just moved out of the family home to start a university course. Although she has always been healthy in the past, she has just begun to experience symptoms of schizophrenia, such as delusions and hallucinations.

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

(Total 4 marks)

2

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

(Total 4 marks)

3

Discuss biological explanations for schizophrenia.

(Total 16 marks)

4

Discuss reliability **and/or** validity in relation to the diagnosis and classification of schizophrenia.

(Total 8 marks)

5

A researcher investigated the effectiveness of typical and atypical psychotics in schizophrenia patients with either negative or positive symptoms.

**Percentages of patients with either negative or positive symptoms, responding well to typical or atypical antipsychotics.**

	Number of patients responding well to atypical antipsychotics	Number of patients responding well to typical antipsychotics
Patients with negative symptoms	30	16
Patients with positive symptoms	60	60

What does the data in the table seem to show about the effectiveness of typical and atypical antipsychotics in the treatment of schizophrenia?

(Total 4 marks)

- 6** Apart from effectiveness, briefly explain **one** limitation of drug therapy for schizophrenia. (Total 2 marks)
- 7** Briefly outline family dysfunction as an explanation for schizophrenia. (Total 2 marks)
- 8** Discuss token economies as a method used in the management of schizophrenia. (Total 8 marks)
- 9** Discuss biological explanations for schizophrenia. (Total 16 marks)
- 10** Outline and compare **two** treatments for schizophrenia. (Total 16 marks)
- 11** Explain how family dysfunction might be involved in schizophrenia. Refer to **one or more** types of family dysfunction in your answer. (Total 4 marks)
- 12** Describe and evaluate biological explanations for schizophrenia. Refer to evidence in your answer. (Total 16 marks)
- 13** Discuss issues associated with the classification **and / or** diagnosis of schizophrenia. (Total 16 marks)
- 14** 'There is considerable evidence that schizophrenia is caused by biological factors. These can be genetic, neuroanatomical, biochemical, viral or a combination of such factors'.  
Discuss biological explanations of schizophrenia. (Total 16 marks)
- 15** Outline **one** psychological explanation of schizophrenia. (Total 4 marks)
- 16** Evaluate psychological explanations of schizophrenia. (Total 16 marks)

17

'In an important and influential criticism of the diagnosis of mental illness, Rosenhan (1973) showed that healthy 'pseudopatients' could gain admission to psychiatric hospital by pretending to have auditory hallucinations. Although systems of classification and diagnosis have changed considerably since the 1970s, many people still have concerns about their accuracy and appropriateness.'

Discuss issues surrounding the classification and diagnosis of schizophrenia.

**(Total 16 marks)**

18

'Therapies can be time-consuming and, in some cases, uncomfortable for the client. It is, therefore, very important to offer the most appropriate and effective type of treatment.'

Outline and evaluate **two or more** therapies used in the treatment of schizophrenia.

**(Total 16 marks)**

## Mark schemes

1

[AO2 = 4]

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

### Content:

Application of the diathesis-stress model as follows:

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

2

[AO1 = 2 and AO3 = 2]

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

## Outline

### Possible content:

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

Credit other relevant aspects of cognitive behaviour therapy.

### Possible limitations:

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

Credit other relevant limitations.

3

[AO1 = 6 and AO3 = 10]

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

**Possible content:**

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

**Possible discussion points:**

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

Credit other relevant discussion points.

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

Level	Marks	Description
4	7 – 8	Outline of reliability and/or validity in relation to the diagnosis and classification of schizophrenia is accurate and generally well detailed. Discussion is effective. The answer is clear, coherent and focused. Specialist terminology is used effectively. Minor detail and/or expansion of argument sometimes lacking.
3	5 – 6	Outline of reliability and/or validity in relation to the diagnosis and classification of schizophrenia is evident. There are occasional inaccuracies. There is some effective discussion. The answer is mostly clear, organised and focused. Specialist terminology mostly used effectively.
2	3 – 4	Outline of reliability and/or validity in relation to the diagnosis and classification of schizophrenia is present. Focus is mainly on description. Any discussion is of limited effectiveness. The answer lacks clarity, accuracy, organisation and focus in places. Specialist terminology used inappropriately on occasions.
1	1 – 2	Outline of reliability and/or validity in relation to the diagnosis and classification of schizophrenia is limited. Discussion is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology either absent or inappropriately used.
	0	No relevant content.

**Possible Content:**

- Definitions of reliability in relation to diagnosis and classification – level of agreement on the diagnosis by different psychiatrists across time and cultures; stability of diagnosis over time given no change in symptoms
- Definitions of validity – the extent to which schizophrenia is a unique syndrome with characteristics, signs and symptoms
- Identification of issues such as range of symptoms across individuals, comorbidity and symptom overlap

**Possible discussion points:**

- Use of evidence on the reliability of major classification systems (ICD IV, DSM IV or V)
- Use of evidence on reliability of diagnosis between different clinicians and across different cultures
- Range of different symptoms in different patients – positive and negative symptoms
- Evidence on comorbidity with eg depression, mixed syndromes eg schizo-affective disorder, symptom overlap eg bipolar disorder
- Factors affecting reliability and validity of diagnosis
- Wider implications of reliability and validity of diagnosis eg labelling, cultural bias.

Material must be explicitly linked to reliability and/or validity to earn credit.

Credit other relevant information.

**5**

**AO2 = 4**

Level	Marks	Description
2	3 – 4	Knowledge of the effectiveness of atypical and typical antipsychotics on positive and negative symptoms is clear and mostly accurate. The findings in the table are used appropriately. The answer is generally coherent with effective use of terminology.
1	1 – 2	Some knowledge of the effectiveness of atypical and typical antipsychotics and positive and negative symptoms is evident. Use of findings from the table is not always effective. The answer lacks accuracy and detail. Use of terminology is either absent or inappropriate.
	0	No relevant content.

- Atypical and typical antipsychotics are equally effective against positive symptoms with more than half of patients responding well
- The main difference is that negative symptoms respond better to atypical antipsychotics, 30% improve compared with typical antipsychotics 16%
- Atypical antipsychotics are more effective against negative symptoms
- These findings support the view that they act on different neurotransmitters

**6**

**AO3 = 2**

Content:

- All drugs have side effects that can be severe and may lead to patients avoiding medication and hence to relapse
- It is questionable whether or not severely affected patients can give informed consent to medication
- Drugs may simply be suppressing symptoms



**2 marks** for a clear and coherent limitation

**1 mark** for a vague/muddled limitation or limitation merely identified

**7**

**AO1 = 2**

**Possible content:**

- Characteristics of dysfunction eg difficulties in communication, high levels of interpersonal conflict
- Critical and controlling parents, expressed emotion
- The role of double bind in the development of negative symptoms
- The role of hostility and disapproval in positive symptoms and relapse
- The role of expressed emotion in relapse

**2 marks** for a clear and coherent outline

**1 mark** for a vague /muddled outline

**8**

**AO1 = 3 and AO3 = 5**

Level	Marks	Description
4	7 – 8	Outline of token economies is generally accurate and mostly well detailed. Discussion is thorough and effective. The answer is clear, coherent and focused. Specialist terminology is used effectively. Minor detail sometimes lacking.
3	5 – 6	Outline of token economies is generally accurate. Discussion is mostly effective. The answer is mostly clear and organised. Specialist terminology mostly used effectively.
2	3 – 4	Outline of token economies is present. There are some inaccuracies. Discussion is sometimes effective. There is some appropriate use of specialist terminology.
1	1 – 2	Outline of token economies is limited and lacks detail. There is substantial inaccuracy/muddle. Discussion is limited, poorly focused or absent. Specialist terminology either absent or inappropriately used.
	0	No relevant content.

**Possible content:**

- Outline of token economies – awarding of ‘tokens’ when patients with schizophrenia show desirable behaviour. Tokens can be exchanged later for eg sweets
- Based on Skinnerian operant conditioning principles
- Used for behavioural shaping and management so that patients in long stay hospitals are easier to manage

**Possible discussion points:**

- Evidence suggests token economies can be effective in improving behaviour in psychiatric hospitals
- Token economies do not address symptoms of schizophrenia, so they are not a 'treatment'
- Not effective with unresponsive patients eg with negative symptoms
- Ethical issues – treats patients as lab rats

Credit other relevant information.

**9**

**Marks for this question: AO1 = 6, AO3 = 10**

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

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## **AO1**

Candidates are required to present two or more explanations.

The main biological explanations of schizophrenia are as follows:

- genetics – there is considerable evidence of a genetic predisposition to develop schizophrenia
- biochemistry – the dopamine hypothesis argues that elevated levels of dopamine are related to symptoms of schizophrenia
- neuroanatomy – differences in brain structure (including ventricle size, brain weight and symmetry) have been identified in people with schizophrenia.

Other creditworthy explanations include season of birth, viral influences, birth complications, links to substance abuse and neuropsychological models put forward by Frith and Helmsley. Evolutionary explanations can gain credit.

Given the difficulty of describing genetic explanations in detail, credit is given for straight descriptions of twin, family and adoptive studies which support the genetic explanation of schizophrenia (e.g. Kendler).

## **AO2 / AO3 = 16 marks**

Credit is awarded for a discussion of biological explanations for schizophrenia. Many evaluation points are relevant to more than one explanation, so partial performance criteria are unlikely to apply.

Evaluation will depend on the explanation offered, but is likely to include supporting evidence and methodological critique of that evidence.

Methodological evaluation of research is creditworthy, provided the implications for the explanation are made explicit.

Likely material includes:

- genetics – quality of evidence, difficulties in separating environmental and genetic influences in family history and twin studies, sample sizes in twin studies, changes in diagnostic criteria for schizophrenia and zygosity
- biochemistry – difficulties in establishing cause and effect, supporting evidence from post mortem / scanning studies and animal studies, strengths and limitations of evidence
- neuroanatomy – difficulties in establishing cause and effect, supporting evidence from post mortem / scanning studies, strengths and limitations of evidence

The diathesis stress model can be used to demonstrate the interplay of genetic and environmental factors. Explicit comparison with other approaches / explanations can be an effective way of achieving credit. Candidates who link biological explanations such as genetic basis of schizophrenia to the dopamine system are also likely to achieve good marks.

**10**

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

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

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### **AO1**

Marks for outlines of two treatments for schizophrenia. It is acceptable to outline two different drug treatments although most students are likely to focus on anti-psychotic drugs and a form of psychotherapy (ie a non-biological treatment).

Antipsychotic drugs include traditional neuroleptics which block dopamine, eg chlorpromazine and more recently introduced atypical anti-psychotics, eg clozapine and risperidone which act on dopamine and serotonin.

Psychotherapies include: cognitive behaviour therapy to give coping strategies to gain control of the hallucinations and delusions; cognitive therapy involving reality testing and challenge; behaviour therapy, eg token economies used in institutions; family therapy to increase tolerance and reduce negative attitudes; milieu therapy to enhance normalisation. Credit use of psychodynamic therapy if student makes a case for its use.

Note that community care in itself is not a treatment therefore not appropriate.

### **AO3**

Marks for comparison of the two treatments. Comparison points will vary according to the treatments used but should include discussion of relative effectiveness. Further comparison points might include: use of evidence to support claims of effectiveness; durability of effect over the long-term; suitability for different sub-types / symptoms; comparison of side-effects, either physical or other unintended outcomes; differences in attitudes towards the two types of treatment, either patient attitudes or more widely; preference for combination treatments; individual differences in preference and responsiveness; role of patient, ie passive / active; discussion of the usefulness of specific treatments in the context of institutionalisation v community care can also be credited. Credit evaluation of evidence where used in comparison / discussion.

Credit use of relevant evidence.

**11**

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

[AO1 = 2, AO2 = 2]

**AO1**

Up to two marks for knowledge of one or more types of family dysfunction. Likely answers: double-bind; the schizophrenogenic mother; family schism and skew; communication difficulties; interpersonal conflict; high expressed emotion. Credit should be awarded for one type in some detail or for two (or more) done briefly. Candidates who simply name two types of dysfunction - credit one mark. No marks for simply naming one type.

**AO2**

Up to two marks for explanation of how the type(s) of dysfunction might be involved in schizophrenia. Candidates might consider the way in which the dysfunction could lead to the development of schizophrenia or might consider the possibility that schizophrenia in a child might lead to the family dysfunction.

**12**

**Marks for this question: AO1 = 6, AO3 = 10**

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

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### **AO1**

Marks for knowledge of biological explanations for schizophrenia. Likely content: Schizophrenia – dopamine hypothesis – excess dopamine activity at the synapse; increased number of D2 receptors; genetic evidence eg Gottesman (2001) higher concordance for MZ pairs than DZ pairs; adoption studies (Tienara 1991); neuroanatomical correlates eg enlarged ventricles.

### **AO3**

Up to 8 marks for evaluation of the biological explanation for schizophrenia. Likely content: other possible explanations eg role of social factors, possibly as a trigger; problems with the evidence, for example, issues with twin study evidence; reductionism – biological explanations – oversimplification to explain a complex multi-faceted disorder at the level of cells and chemicals; determinism – the extent to which the disorder might be avoidable, treatable etc.

Other possible explanations eg role of social factors, possibly as a trigger; problems with the evidence, for example issues with twin study evidence; reductionism – biological explanations – oversimplification to explain a complex multi-faceted disorder at the level of cells and chemicals; determinism – the extent to which the disorder might be avoidable, treatable etc. Credit use of relevant evidence where used to evaluate the explanations.



**13**

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

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

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### **AO1**

Credit is awarded for description of issues concerned with classification and diagnosis of schizophrenia, most of which are related in some way to reliability and validity. Some issues are specifically relevant to schizophrenia eg the range of symptoms / sub-types of schizophrenia and the difficulty of distinguishing between them. Reference may be made to co-morbidity, culture and gender bias. Other issues surrounding the classification and diagnosis of mental disorders in general can receive credit as long as they are made relevant to schizophrenia.

### **AO3**

Discussion should be of the issues identified when classifying and / or diagnosing schizophrenia. Answers should evaluate and offer commentary on the issues they have identified, for example by considering the consequences arising from the issue. Answers may include discussion of advantages of using classification systems in relation to effective treatment programmes and support and / or problems associated with classification and diagnosis. For example, diagnosis might lead to labelling and stigmatisation (Scheff 1966) causing long-term problems of getting / keeping employment and leading to a self-fulfilling prophecy.

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

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

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### **AO1**

As indicated in the quotation, there are various biological explanations of schizophrenia. Candidates can access full marks by covering two in depth or more than two in slightly less detail.

It is difficult for candidates to offer detailed descriptions of the genetic explanation so, in this case, description of studies which have provided evidence for heritability can be regarded as elaboration of the explanation and, therefore, awarded credit. The most likely biochemical explanation focuses on the dopamine hypothesis. Neuroanatomical explanations tend to focus on damaged brain structures (abnormalities in the frontal and pre-frontal cortex, enlarged ventricles etc). Other acceptable explanations include viral influences, birth complications, season of birth, maternal stress in pregnancy and links to substance abuse. Candidates may present neuropsychological models (Frith), this is acceptable provided that the focus is on biological elements of the model. Evolutionary explanations are acceptable.

### **AO3**

Candidates are required to provide an evaluation of biological explanations of schizophrenia. The question refers to explanations in the plural. Candidates can legitimately refer to psychological explanations but answers will only gain credit where the material is clearly used to offer commentary on the worth of biological explanations. Similarly, any discussion of therapies is only creditworthy if it is directly relevant to an assessment of the underlying explanation.

Evaluation will depend on the particular explanation eg in the case of genetics, candidates could discuss the quality of supporting evidence and the problems of drawing appropriate conclusions. For example, the data from some adoption studies have been re-analysed (eg Wahlberg et al, 2000 re-analysed data from Tienari et al, 2000) to show rather less support for genetic factors than the original researchers claimed. There is also a problem in longitudinal adoption studies that diagnostic criteria for schizophrenia have changed significantly over time.

Candidates might also consider the current situation in the search for the location of specific genes. Until these have been reliably identified, it is difficult to understand the precise mechanism of genetic transmission.

Biological explanations can be described as reductionist and this can be elaborated as part of the discussion.

Evaluation of other biological explanations might also focus on the quality of supporting evidence (eg contradictory results from different studies, issues of cause and effect, animal studies).

One general point that can be applied to most biological explanations concerns the diversity of symptoms found in people either diagnosed with schizophrenia or a sub-type of schizophrenia – it may be the case, for example, that some explanations can account for certain symptoms better than others.

Candidates might also use the diathesis-stress model as a way of reconciling biological and psychological explanations.

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**

Candidates are required to provide an outline of **one** psychological explanation of schizophrenia. Where candidates provide more than one explanation, examiners should credit the best account. Descriptions of biological explanations are not credit-worthy. Socio-cultural explanations are included in the specification as examples of psychological explanations and are perfectly acceptable here. Answers are most likely to focus on one of the following explanations:

- psychodynamic (including family systems theory)
- cognitive
- behavioural.

Candidates could also legitimately outline the role of expressed emotion in schizophrenia or refer to the social drift hypothesis. However, in both cases, they are more relevant to explaining the maintenance of schizophrenia rather than its origins so candidates might find it difficult to access full marks here.

An outline of the diathesis-stress explanation is acceptable provided the candidates emphasise the psychological aspect.

Evaluation of explanations receives no credit.

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

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- Content appears as a bulleted list
- No IDA expectation in A Level essays, however, credit for references to issues, debates and approaches where relevant.

### **AO2 / AO3 = 16**

Candidates are required to provide an evaluation of psychological explanations of schizophrenia. The question refers to **explanations** in the plural since it could be difficult for candidates to provide sufficient evaluative material on a single psychological explanation for full marks. However, given that evaluative points are often relevant to more than one explanation, no partial performance criteria apply for this question.

Candidates can legitimately refer to biological explanations but answers will only gain credit where the material is clearly used to offer commentary on the worth of psychological explanations. Detailed descriptions of biological explanations cannot gain credit. Similarly, detailed descriptions of psychological explanations cannot gain credit – the focus in this part of the question is on evaluation.

The evaluation can be both positive and negative:

One criticism of psychodynamic theory, for example, is that it places responsibility on mothers. The behavioural explanation is criticised, for example, because it is hard to accept that the bizarre and complex patterns of behaviour seen in people with schizophrenia can be acquired through simple learning processes; the cognitive explanation can be criticised for being descriptive rather than explanatory.

More general evaluations that apply to most psychological explanations include the following: none of them can adequately account for the indisputable fact that schizophrenia runs in families and that the increased risk is directly associated with the degree of relatedness.

There is a lack of strong empirical evidence to support the psychological explanations and there is also a problem of disentangling cause and effect (eg does faulty thinking cause schizophrenia or vice versa?). It is also legitimate to refer to therapies ie that treatments arising from psychodynamic and behavioural explanations appear to have little therapeutic effect in schizophrenia.

Another general point concerns the diversity of symptoms found in people diagnosed either with schizophrenia or a sub-type of schizophrenia – it may be the case, for example, that some explanations can account for certain symptoms better than others.

Candidates might also use the diathesis-stress model as a way of reconciling biological and psychological explanations.

**AO2/AO3 Mark bands****16 – 13 marks Effective**

Evaluation demonstrates sound analysis and understanding. The answer is well focused and shows coherent elaboration and/or a clear line of argument. Ideas are well structured and expressed clearly and fluently. Consistently effective use of psychological terminology. Appropriate use of grammar, punctuation and spelling.

**12 – 9 marks Reasonable**

Evaluation demonstrates reasonable analysis and understanding. The answer is generally focused and shows reasonable elaboration and/or a line of argument is evident. Most ideas appropriately structured and expressed clearly. Appropriate use of psychological terminology. Minor errors of grammar, punctuation and spelling only occasionally compromise meaning.

**8 – 5 marks Basic**

Analysis and evaluation demonstrate basic, superficial understanding. The answer is sometimes focused and shows some evidence of elaboration. Expression of ideas lacks clarity. Limited use of psychological terminology. Errors of grammar, punctuation and spelling are intrusive.

**4 – 1 marks Rudimentary**

Analysis and evaluation is rudimentary, demonstrating very limited understanding. The answer is weak, muddled and incomplete. Material is not used effectively and maybe mainly irrelevant. Deficiency in expression of ideas results in confusion and ambiguity. The answer lacks structure, often merely a series of unconnected assertions. Errors of grammar, punctuation and spelling are frequent and intrusive.

**0 marks**

No creditworthy material is presented.

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

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

Please note that although the content for this mark scheme remains the same, on most mark schemes for the new AQA Specification (Sept 2015 onwards) content appears as a bulleted list.



## **AO1**

There are many issues surrounding the classification and diagnosis of mental disorders in general, most of which are related in some way to the idea of reliability and validity. It is acceptable to describe overarching issues as long as they have relevance to schizophrenia. However, there are some issues which are particularly relevant to schizophrenia eg the range of sub-types of schizophrenia and the difficulty of distinguishing between them. Issues include:

- The reliability of the major classification systems ICD and DSM.
- The availability of other diagnostic criteria for schizophrenia eg Schneider criteria.
- The lack of homogeneity in schizophrenic symptoms.
- The problems of labelling.
- The problem of co-morbidity.
- The problem of distinguishing schizophrenia from, for example, mood or personality disorders.
- The lack of objective tests for schizophrenia.
- The difficulty of being able to predict outcome or response to treatment.
- Cultural differences in symptom presentation.
- The question of whether schizophrenia is a mental disorder at all.

## **AO3**

Candidates should evaluate and offer commentary on the issues they have identified for example considering the consequences arising from the issue. They could discuss the advantages and disadvantages of using classification systems to diagnose schizophrenia. For example, diagnosis might lead to labelling which causes long-term problems for the person with schizophrenia in terms of getting / keeping employment or establishing relationships. On the other hand, careful diagnosis can lead to effective treatment programmes which would, otherwise, not be offered.

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

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

Please note that although the content for this mark scheme remains the same, on most mark schemes for the new AQA Specification (Sept 2015 onwards) content appears as a bulleted list.

## **AO1**

The question does not specify biological or psychological therapies so either or both are acceptable. The most likely therapy to be described is drug therapy, but various others are acceptable. Examiners should be mindful of a depth / breadth trade-off here.

The important point is that therapies must be described in the context of schizophrenia. Descriptions of therapies which are not appropriate for schizophrenia such as systematic desensitisation are not creditworthy. However, discussion of unsuitable treatments could be made relevant as part of the discussion.

There are some treatments which were used for schizophrenia in the past but are no longer considered suitable in most cases, eg ECT. Although creditworthy, discussion should make clear the limited contemporary use of such treatments.

Answers which offer two different forms of drug therapy are acceptable if they have different modes of action.

## **AO3**

Candidates are likely to evaluate therapies in terms of the issues raised in the quotation, but the wording allows discussion of a wider range. Evaluation must be relevant to therapies suited to schizophrenia. Material on other therapies will only be creditworthy if it is explicitly used to offer relevant commentary.

Issues of appropriateness could include:

- the nature of the disorder means that some therapies are more appropriate than others
- factors affecting the choice of treatment, eg financial constraints, availability of appropriate therapist, accuracy of original diagnosis
- ethical issues, eg possible harmful side-effects, issues of informed consent, dehumanising effects of some treatments.

Issues of effectiveness could include:

- problems of measuring effectiveness, eg when to measure, how to measure, what criteria to choose
- wide range of symptoms – treatments might be effective for some but not others
- placebo effects.

Credit could be for evaluation of research in terms of methodological issues, reliability, validity and the extent to which generalisations can be made, eg treatment outcome research often has problems of operational definition and issues concerning the allocation of participants to treatment groups.