Obesity – Mark Scheme

Q1.

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

Examples of eating disorders given in the Specification are anorexia nervosa, bulimia nervosa and obesity. Each of these has a range of psychological explanations, such as social / cultural influences (eg social learning theory and other conditioning explanations) and psychodynamic approaches (eg Bruch, Minuchin).

Explanations of obesity are likely to focus on a range of cultural and environmental factors. These should be considered as one psychological explanation.

Answers should be assessed on their accuracy and coherence, and focus on a *single* disorder. Where a single disorder cannot be identified, such generic answers eg on the role of social learning on eating disorders in general, can earn a maximum of 3 marks. Studies can be credited to the extent to which they illustrate the explanation.

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.

Q2.

[AO2 = 4]

Level	Marks	Description
2	3 – 4	Knowledge of one or more strategies for losing weight and maintaining weight loss 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 one or more strategies for losing weight and maintaining weight loss is evident. Application is not always effective. The answer lacks accuracy and detail. Use of terminology is either absent or inappropriate.
	0	No relevant content.

Possible content:

- Cognitive therapy might help especially if it also emphasises the positive rewards of dieting
- Group-based social and practical support eg joining an organised group such as Weight Watchers
- Interventions combining group therapy, health advice and exercise have been shown to produce moderate but sustained weight loss
- Moderating aims (not try to lose a kilogram every week) increases the chances of sustained success
- Taking an interest in preparing food and organising a varied healthy diet help restrained eaters see dieting as very positive

Credit other relevant material.

No credit for knowledge of the boundary model and restraint theory.

Q3.

[AO1 = 6 AO3 = 10]

Level	Marks	Description
4	13 – 16	Knowledge of one or more biological explanations for obesity is accurate and generally well detailed. Evaluation is thorough with effective use of material. 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 one or more biological explanations for obesity is evident. There are occasional inaccuracies. Evaluation is apparent and use of material is 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 one or more biological explanations for obesity is present. Focus is mainly on description. Any evaluation or use of material 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 one or more biological explanations for obesity is limited. Evaluation/use of material 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:

- Specific genes may play a role in some cases of obesity
- Evolutionary approaches eg the 'thrifty' gene, suggest that we are pre-programmed to store food in times of plenty, and to use it in times of scarcity. Now that in developed countries food is relatively plentiful, the thrifty gene is no longer adaptive and leads to obesity.
- The evolutionary approach also suggests that we are pre-programmed to like the taste of sweet foods. The availability of foods with high sugar content therefore fuels obesity.
- Abnormalities in the neural and hormonal control of feeding behaviour could lead to overeating and obesity. These might include physical damage to hypothalamic centres, or changes in levels of key hormones such as leptin and ghrelin.

Possible evaluation points

- No key genes yet identified that explain more than a tiny number of cases of obesity.
- Wide variations in incidence of obesity within and across cultures, suggesting the evolutionary 'drives' are not the main factor.
- Evidence that obesity increases when groups first enter western developed societies with plentiful food supports an evolutionary perspective (eg the Pima Indians).
- Limited evidence of abnormal levels of hormones such as leptin and ghrelin.
- Biological explanations are countered by evidence for the role of early learning, social and cultural factors in food preferences; these factors may lead to food fulfilling other functions, such as mood regulation and behavioural control, that in turn could lead to obesity.

- Implication of accepting biological explanations, including economic implications.

Credit other relevant material. Note that students may cover one explanation in more detail, or more than one explanation in less detail.

Q4.

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

Level	Marks	Description
4	13 – 16	Knowledge is accurate and generally well detailed. At least two explanations 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 explanations 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 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.

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

Explanations might include: Polivy's work on restraint theory, developed later into the boundary model. This approach incorporates some aspects of Nisbett's biological / genetic body weight set-point theory. Health psychology models such as the theory of planned behaviour or planned relapse could also be used.

Although candidates are likely to take a general approach to explanations for the

success and / or failure of dieting, that describes both success and failure, some may explicitly focus on either the success or the failure of dieting, using the counter position as evaluation.
Examiners should assess the material in the way most favourable to the candidate.

AO3

Research evidence supporting, for instance, the boundary model would be an effective discussion route, as would an evaluation of the internal / external validity of laboratory-based studies. General commentary could include the complex nature of dieting behaviour, for instance the interplay of cognitive, biological (genetic), and affective factors. Cultural attitudes to eating behaviour would also be important.

Issues relevant to explanations for the success or failure of dieting include: cultural and gender biases in research; cultural and gender differences; free will and determinism; nature-nurture; reductionism etc.