



# **MARKSCHEME**

**May 2010**

**PSYCHOLOGY**

**Standard Level**

**Paper 1**

10 pages

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**SECTION A****Paper 1 section A markbands**

*In applying the markbands the concept of “best fit” should be used: a response that meets most of the statements in a particular band, but not necessarily all, can still be awarded marks in the markband. The markband that best fits the response should be determined first. Then, by reference to the markband above and the markband below, the mark should be determined.*

**Markband**

- 7 to 8** The demands of the question are addressed effectively within a logical structure. The argument is clearly supported by appropriate knowledge and understanding from the perspectives. The answer contains appropriate analysis but there may be minor omissions. At the top of this markband the demands of the question are addressed effectively, in a focused and logical structure. Arguments are supported by appropriate knowledge and understanding, and analysis.
- 5 to 6** At the bottom of this markband the question is addressed. The answer contains accurate knowledge and understanding but is mainly descriptive with some implicit analysis that is not sufficiently related to the question. There is a basic structure to the answer. At the top of this markband the demands of the question are addressed, mainly within a logical structure. The response is sufficiently accurate, relevant and adequate to support a sound answer. Analysis may not be well developed.
- 3 to 4** The question is partially addressed, with limited accurate, relevant and factual knowledge and understanding. There is an attempt to structure the answer but it is not sustained throughout the answer.
- 1 to 2** There is an attempt to answer the question, but knowledge and understanding of the perspective is limited, often inaccurate and of marginal relevance to the question.
- 0** If the answer does not achieve the standard described in markband 1 to 2, a mark of 0 should be recorded.

## Biological Perspective

1. **Explain why the reductionist approach, as adopted by many biological psychologists, may be regarded as controversial.** [8 marks]

*Refer to the paper 1 section A markbands when marking this question.*

It could be argued that much psychological research is reductionist since it aims to reduce data and simplify explanations so that we may attempt to better understand behaviour. The controversial nature of any explanation of behaviour may result from the fact that some aspects, influences or alternatives are often ignored when taking a reductionist approach. Additionally, generalizing results from research that is intentionally limited in nature can be controversial.

While some may argue that a reductionist approach has a negative connotation, there are times where it can be appropriate. Generally, biological psychologists regard their work from a positivistic perspective associated with measurement, replicable experiments, science and predictability. These factors are more amenable to investigation using a reductionist approach rather than the holistic methods associated with other types of psychology. The downside of biological reductionism according to Tavris and Wade is in drawing premature conclusions, making unwarranted assumptions about cause and effect and exaggerating the power of genes.

Award [7 to 8 marks] for responses that make clear the controversial nature of taking a reductionist approach within the biological perspective.

Award [4 to 6 marks] where the reductionist approach is explained in relation to the biological perspective but the controversial issue is not explicitly addressed.

Award [1 to 3 marks] for responses demonstrating a rudimentary understanding of reductionism without relation to the biological perspective. The issue of controversy is not addressed.

## Cognitive Perspective

2. Explain how *one* key concept from the cognitive perspective helps us understand behaviour. *[8 marks]*

*Refer to the paper 1 section A markbands when marking this question.*

A range of examples of key concepts may be appropriately chosen, such as reconstructive memory, language acquisition device, problem solving, schema, heuristics, attention. The explanation should make clear the link between the concept and understanding behaviour rather than a simple description of the concept itself. For example, a link may be made between reconstructive memory and eyewitness testimony or between schema and the development of stereotypes.

Award *[7 to 8 marks]* for a response which offers accurate knowledge and understanding of a key concept related to the cognitive perspective and explicitly relates it to understanding behaviour.

Award *[4 to 6 marks]* for a response where one relevant key concept is well described but there is only an implicit attempt to link the concept to understanding behaviour.

Award *[1 to 3 marks]* for a response providing a limited description of one key concept with little or no attempt to link the concept to understanding behaviour.

## Learning Perspective

3. Explain *one* contribution of the learning perspective to the *scientific* study of behaviour. [8 marks]

*Refer to the paper 1 section A markbands when marking this question.*

Contributions should be related to the scientific study of behaviour within the learning perspective. Research studies may be used to illustrate the contributions, but they are not necessary.

Contributions could include:

- reliance on empirical data to support/generate theories;
- focus on observable, recordable, data;
- typical use of quantitative data (but qualitative data are also used);
- control of variables in observational and experimental research (in experiments, manipulation of an independent variable);
- intention to generalize from studies to wide populations (including animal to human generalization).

Award [7 to 8 marks] where a contribution, clearly related to the scientific study of behaviour, has been accurately explained, using appropriate technical language.

Award [4 to 6 marks] where a contribution has been accurately explained but is not sufficiently related to the study of scientific behaviour.

Award [1 to 3 marks] for responses that offer a contribution from the learning perspective unrelated to the scientific study of behavior, *e.g.* classical or operant conditioning.

## SECTION B

### Paper 1 section B markbands

*In applying the markbands the concept of “best fit” should be used.*

*A response that meets most of the statements in a particular band, but not necessarily all, can still be awarded marks in the band.*

*The band that best fits the response should be determined first. Then, by reference to the band above and the band below, the mark should be determined.*

### Markband

- 17 to 20** The demands of the question are addressed effectively in a focused and logical structure. Arguments are supported by appropriate knowledge and understanding and in-depth analysis. Evaluation is balanced and well-developed. Cultural, ethical, gender or methodological considerations are an integral part of the response.
- 14 to 16** The demands of the question are addressed effectively within a structured framework. The argument is supported by appropriate knowledge and understanding from the perspectives. The answer contains appropriate analysis, but there may be minor omissions. Evaluation is clear and applied appropriately. Cultural, ethical, gender or methodological considerations are present and appropriate to the question.
- 11 to 13** The demands of the question are addressed mainly within a structured framework. The answer contains accurate knowledge and understanding. Some limited analysis is offered. Evaluation is limited or may not be well developed. Cultural, ethical, gender or methodological considerations are present and appropriate to the question.
- 8 to 10** There is a basic structure to the answer. The question is addressed. The answer contains accurate knowledge and understanding but is mainly descriptive. There may be minimal reference to cultural, ethical, gender or methodological considerations appropriate to the question.
- 6 to 7** There is an attempt to structure the answer but it is not sustained throughout the answer. The question is partially addressed, with limited accurate, relevant and factual knowledge and understanding. There may be minimal reference to cultural, ethical, gender or methodological considerations appropriate to the question.
- 4 to 5** There is little sense of structure in the answer. Although there is an attempt to answer the question, knowledge and understanding of the perspectives is limited, often inaccurate and of marginal relevance to the question. There is no reference to cultural, ethical, gender or methodological considerations.
- 1 to 3** There is almost no organizational structure. There is very little or no understanding of the question, nor evidence of knowledge of the perspectives. The answer consists of no more than a few relevant facts.
- 0** If the answer does not achieve the standard described in mark band 1 to 3, a mark of 0 should be recorded.

4. Describe *one* study from the biological perspective and discuss how this study has contributed to our understanding of behaviour. [20 marks]

*Refer to the paper 1 section B markbands when awarding marks.*

The study should be clearly taken from the biological perspective. Answers should focus on the biological nature of the study. The range of studies could include research on genetics, neurotransmitters, bodily rhythms, non-human animals, brain injuries and diseases.

Discussion should focus on how the findings of the study described affects our understanding of behaviour. It is probable that many answers may relate to brain injuries (Phineas Gage) or brain surgery (severing of the corpus callosum), but many other studies will also be acceptable. For example, candidates may discuss how findings from studies on serotonin and noradrenaline help understanding depressive behaviour or how twin studies help understanding how genetic factors influence behaviour such as intelligence.

It is probable that several candidates will present mainly a description of either of these examples, but they are required to show **HOW** the study contributes to our understanding of behaviour.

Award **[14 to 20 marks]** for a thorough description of a relevant study and an informed discussion on how the study has contributed to understanding of behaviour.

Award **[8 to 13 marks]** for a description of a relevant study where the associated discussion is insufficiently developed to clearly explain the contribution made by the study to understanding behaviour.

Award **[1 to 7 marks]** for a minimal description of a relevant study but where little or no explanation is offered for the contribution made by the study to understanding behaviour.



5. **Assess the extent to which *one* model of information processing has helped in understanding cognitive processes.** **[20 marks]**

*Refer to the paper 1 section B markbands when awarding marks.*

The model must be shown to relate to the idea of information processing, including the processes of receiving, interpreting, storing and responding to information. The analogy of a computer is a very likely characterization of the information processing approach.

Models may be related to any of the key concepts mentioned in the syllabus, for example: attention, perception, memory, language, schemas.

Models such as working memory model and multi-store model of memory may be assessed.

Award **[14 to 20 marks]** for responses where the requirement of the question to assess “to what extent” the model has helped understanding of cognitive processes is well developed. Both strengths and limitations of the model are addressed.

Award **[8 to 13 marks]** where an appropriate information processing model is adequately described but there is only a limited discussion of how the model has helped understanding of cognitive processes. There is only a limited discussion of strengths and limitations of the model.

Award **[1 to 7 marks]** where an appropriate model is superficially described. The assessment of the extent to which the model has added to understanding of cognitive processes is minimal or omitted.

6. **Using empirical studies explain *two* research methods (e.g. experiments, observations) employed by psychologists in the learning perspective.** [20 marks]

*Refer to the paper 1 section B markbands when awarding marks.*

When conducting research, psychologists tend to employ research methods that align with their own approach, the topic being investigated, *etc.* Psychologists within the learning perspective have tended to prefer more rigorous, scientific research methods, such as experiments, rather than qualitative methods. However, as the learning perspective has evolved, the research methods used have changed accordingly. For example, the experimental method was highly regarded by the behaviourists who focused only on observable behaviour. More recent explanations, such as social learning theories, have taken into account mediating factors. Therefore alternative methodologies, such as observation or self-report, have been effectively employed. Triangulation is now accepted in this perspective in order to better understand the complexity of behaviour.

Studies such as those devised by Pavlov, Skinner, Bandura or Lorenz may be presented as a support for the explanation.

Award [14 to 20 marks] for responses that provide a well-developed explanation of the use of two relevant research methods. The explanation is appropriately supported by learning perspective studies.

Award [8 to 13 marks] for responses that provide limited explanations yet competent description of two relevant research methods. The explanation is relevant to the learning perspective, although linked to learning perspective studies in a less effective manner.

Award [1 to 7 marks] for responses that offer a superficial description of the research methods with little or no explanation. Answers that offer description of empirical studies unrelated to research methods should be awarded marks in this range.

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