

SQ39/H/01 Psychology

Date — Not applicable

Duration — 2 hours

Total marks — 60

SECTION 1 — RESEARCH — 20 marks

Attempt ALL parts of ALL questions.

SECTION 2 — INDIVIDUAL BEHAVIOUR — 20 marks

Attempt ALL questions.

SECTION 3 — SOCIAL BEHAVIOUR — 20 marks

Attempt ALL questions.

Write your answers clearly in the answer booklet provided. In the answer booklet you must clearly identify the question number you are attempting.

Use blue or black ink.

Before leaving the examination room you must give your answer booklet to the Invigilator; if you do not, you may lose all the marks for this paper.





3

4

4

9

### Section 1 — RESEARCH — 20 marks

### Read the following scenario and attempt ALL parts of this question

A psychologist carried out a study which aimed to test the hypothesis that improving the quality and quantity of sleep would enhance the problem-solving ability of a group of 14-year-olds. She selected 40 pupils. The pupils were matched for their academic performance and sleeping habits. She allocated 20 pupils to group A and 20 pupils to group B.

At the beginning of the study, all 40 pupils were given the same problem-solving task. The time taken to solve the problem was recorded. (Table 1)

Pupils in group A were then taught a night time routine to improve the quality and quantity of their sleep. They were asked to stick to this routine for two weeks. Group B were not taught the night time routine.

At the end of two weeks all 40 pupils were given another problem-solving task. The task was similar in demand to the initial task. The time taken for each pupil to solve the problem was recorded. (Table 2)

Table 1: Mean and range of time taken to solve problem-solving task 1

Problem-solving task 1	Group A	Group B
Mean	3 minutes	2·8 minutes
Range	2 minutes	2·5 minutes

Table 2: Mean and range of time taken to solve problem-solving task 2

Problem-solving task 2	Group A	Group B
Mean	2·5 minutes	2·7 minutes
Range	0·5 minutes	1.5 minutes

- 1. (a) Describe the independent variable, dependent variable and one possible extraneous variable within this study.
  - (b) Explain **two** ethical considerations relevant to this study and how the researcher could have addressed them.
  - (c) Explain **two** calculations that the researcher has carried out to summarise the raw data.
  - (d) Analyse this study in terms of the methodology, the results and the conclusion.

# Section 2 — INDIVIDUAL BEHAVIOUR — 20 marks Attempt ALL questions

Describe three factors that affect brain function in relation to sleep, dreams and disorders.
 Choose an individual behaviour topic other than sleep, dreams and disorders.
 Explain this topic using two psychological approaches and/or theories.

# Section 3 — SOCIAL BEHAVIOUR — 20 marks Attempt ALL questions 1. Explain two factors related to obedience that influence behaviour. 6 2. Describe three different types of conformity. 6 3. Evaluate strengths and weaknesses of Milgram's studies of obedience. 8

[END OF SPECIMEN QUESTION PAPER]



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# Marking Instructions

These Marking Instructions have been provided to show how SQA would mark this Specimen Question Paper.

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### General Marking Principles for Higher Psychology

This information is provided to help you understand the general principles you must apply when marking candidate responses to questions in this Paper. These principles must be read in conjunction with the detailed marking instructions, which identify the key features required in candidate responses.

- (a) Marks for each candidate response must <u>always</u> be assigned in line with these General Marking Principles and the Detailed Marking Instructions for this assessment.
- (b) Marking should always be positive. This means that, for each candidate response, marks are accumulated for the demonstration of relevant skills, knowledge and understanding: they are not deducted from a maximum on the basis of errors or omissions.
- (c) The term "or any other acceptable response" is used to allow for the possible variation in candidate responses. Marks should be awarded according to the accuracy and relevance of the evidence provided, whether it is included in the examples given in the specific marking instructions or not.
- (d) Questions that ask candidates to *describe* require them to provide a statement or structure of characteristics and/or features. It will be more than an outline or than a list. It may refer to, for instance, a concept, process, experiment, situation, or facts.
- (e) Questions that ask candidates to *explain* require them to make points that relate cause and effect and/or make relationships between things clear. This explanation may be the product of a process that includes evaluation and/or analysis.
- (f) Questions that ask candidates to *analyse* require them to make points that identify parts, the relationship between them, and their relationships with the whole; draw out and relate implications; analyse data (possibly including calculations and/or a conclusion).
- (g) Questions that ask candidates to *evaluate* require them to make points that make a judgement based on criteria; determine the value of something.
- (h) A development of a point (of description, explanation, evaluation or analysis) will provide further related information and might include exemplification of the point.
- (i) Questions require candidates to use psychological knowledge and understanding to gain marks. Marks will not be awarded to personal opinion that is not supported by such use of psychological knowledge and understanding.
- (j) There may be some degree of flexibility in the way that marks are awarded in a question. This is clearly noted in the specific marking instructions for that question.

# Marking instructions: Section 1 — Research

Q	uesti	on	Expected response	Max mark	Specific marking instructions for each question
1	a		Candidates are expected to give features of each of the variables: the independent variable, dependent variable and any possible single extraneous variable within this study.	3	Candidates can be awarded the 3 marks by providing one point of description for each of the three named variables.  1 mark will be awarded for describing the independent variable as:  • the sleep routine (being taught a sleep routine or no prescribed sleep routine)  or any other acceptable response.  1 mark will be awarded for describing the dependent variable as:  • the time taken to complete a problem-solving task  or any other acceptable response.  1 mark will be awarded for describing a possible extraneous variable such as:  • the possibility that pupils in Group A did not stick to the prescribed sleep routine  • the possibility of pupils in either group varying in their sleep routine  or any other acceptable response.
1	b		Candidates are expected to show the relationship between the research, ethical considerations and ways of addressing ethical issues for this study.	4	Candidates can be awarded 2 marks for ethical considerations and 2 marks for how the researcher could have addressed each of the ethical considerations.  1 mark will be awarded for explaining one ethical consideration relevant to this research, up to 2 marks. Ethical considerations could include:  • Parental consent is required because these participants are under 16 years of age.  • The researcher must consider the ethical issue of causing distress to participants because there is a timed problem-solving test.

Quest	tion	Expected response	Max mark	Specific marking instructions for each question
				<ul> <li>The researcher must consider how to debrief these participants because special arrangements may need to be made due to their age.</li> <li>or any other acceptable response.</li> <li>1 mark will be awarded for explaining how the researcher could have addressed each of the chosen ethical considerations, up to 2 marks, such as:         <ul> <li>Parental consent is required for participants under the age of 16.</li> <li>Informed consent may be obtained by providing full details of the requirements of the experiment to the participants and, since the participants are below the age of consent, to their parent/guardian or other appointed person.</li> </ul> </li> <li>Participants should not be caused distress.         <ul> <li>The researcher should carry out a prior assessment of any risks to the participants and develop protocols for risk management.</li> <li>Research involving vulnerable groups (such as children under 16 years) would normally be considered as involving more than minimum risk. In this study it is likely that some pupils will feel stressed by having to carry out a timed problem-solving test.</li> </ul> </li> <li>Participants should be debriefed.         <ul> <li>Debriefing should enable participants to understand their part in the research and to give them the opportunity to ask any questions about their involvement. When young people are involved in an experiment a parent/guardian or other appointed person should be present.</li> </ul> </li> <li>or any other acceptable response.</li> </ul>
1 c		The candidate is expected to explain two calculations: the mean and the range.	4	Candidates can be awarded the 4 marks by giving points of explanation about calculating the mean and the range.  1 mark will be awarded for an explanation of the calculation of the mean, such as:  • The mean would be calculated by adding up the scores and dividing this by the number of participants in the group.  or any other acceptable response.

Qı	uesti	on Expected response	Max mark	Specific marking instructions for each question
				1 mark will be awarded for a point of explanation of the calculation of the range, such as:
				The range would be calculated by subtracting the lowest score from the highest score for each condition of the experiment.
				or any other acceptable response.
				The other 2 marks can be awarded for points of explanation relating to either the mean or range, such as:
				<ul> <li>The mean provides average score.</li> <li>The mean is one of 3 measures of central tendency.</li> <li>The mean uses all data within its calculation.</li> <li>The mean is most effective when used with interval/ratio data.</li> <li>The range illustrates how spread about the mean the scores are.</li> <li>A larger range would show a wide spread of results indicating effects of confounding/extraneous variables.</li> <li>The range can be affected by extreme scores.</li> <li>The range is a measure of dispersion.</li> </ul>
	_			or any other acceptable response.
1	d	The candidate is expected to analyse the study in terms of the methodology, results and conclusion. This is expected to identify significant features	9	Candidates can be awarded the 9 marks in a number of ways.  1 mark can be awarded for each point, or development of a point, of analysis.  A maximum of 4 marks can be awarded for points relating to any one of the three named aspects: the methodology, the results or the conclusions.  Points of analysis for methodology could include:
		and show the relationship between these		<ul> <li>identifying Group A as the experimental group and Group B as the control group</li> <li>commenting on the use of matched pairs design</li> <li>questioning the methodology — no information is given about whether the sleep routine was</li> </ul>

Question	Expected response	Max mark	Specific marking instructions for each question
	features.		<ul> <li>monitored in a sleep lab or done as a field experiment</li> <li>it is a very small study, and therefore not possible to generalise findings</li> </ul>
			or any other acceptable response.
			Points of analysis for results could include:
			<ul> <li>comparing problem-solving time for each group at the beginning and end of the study</li> <li>comparing problem-solving time between groups</li> </ul>
			or any other acceptable response.
			Points of analysis for conclusions could include:
			<ul> <li>concluding that problem-solving time is improved by following a sleep routine</li> <li>concluding that the validity and reliability of the results can be questioned because there is insufficient information about the control of extraneous variables</li> </ul>
			or any other acceptable response.
			An example of a developed point of analysis would be:
			<ul> <li>Group A is the experimental group who are asked to comply with a sleep routine for two weeks. The other group is the control group who are not asked to follow any routine. (1 mark). A control group is used because the experimenter doesn't want the variable of improved sleep routine to influence the results in this group. (1 mark)</li> </ul>

### Section 2 – Individual Behaviour

Question	Expected response	Max mark	Specific marking instructions for each question
1	The candidate is expected to describe three factors that affect brain function in relation to sleep, dreams and disorders.	6	Candidates can be awarded the 6 marks by giving points of description.  1 mark can be awarded for each point, or development of a point, of description, up to 2 marks for each factor.  Points of description could include information about:  • chemical stimulants • depressants • environmental factors, such as noise  or any other acceptable response.
2	The candidate is expected to explain their chosen topic using any two relevant psychological approaches and/or theories.	14	Candidates can be awarded the 14 marks in a number of ways.  1 mark can be awarded for each point, or development of a point, of explanation.  A maximum of 8 marks can be awarded if the topic is explained using only one psychological approach or theory.  There are a range of possible answers depending on the topic chosen. Assessors must use their professional judgement when awarding marks.  Possible individual behaviour topics, other than 'sleep, dreams and disorders' could include:  • perception, personality, memory, learning, motivation  • or any other suitable topic  Possible psychological approaches or theories could include:  • biological, behaviourist, cognitive, humanistic, psychoanalytic  • or any other relevant approach or theory

### Section 3 — Social Behaviour

Qu	estion	Expected response	Max mark	Specific marking instructions for each question
1		The candidate is expected to explain two factors related to obedience and	6	Candidates can be awarded the 6 marks for points of explanation.  1 mark can be awarded for each point, or development of a point, of explanation of factors related to obedience that influence behaviour, up to a maximum of 3 marks for each factor.
		behaviour.		Points of explanation could include:
				<ul> <li>Obedience is influenced by the socialisation experience: for example children who have authoritarian parents are more likely to follow rules without questioning.</li> <li>The perceived level of authority of the person giving the orders is a factor in obedience: we are more likely to obey when we perceive the person to have a high status.</li> <li>A situational factor, such as the proximity of the person giving the orders, is a factor in obedience: we are more likely to obey if the person is standing beside us.</li> <li>Obedience can be influenced by a person's behaviour, with an agentic shift in behaviour a person believes that the person giving the orders is responsible for the actions/behaviour.</li> </ul>
2		The candidate is expected to describe three types of conformity.	6	Candidates can be awarded the 6 marks in a number of ways.  1 mark will be awarded for:  • a point of description of compliance • a point of description of identification • a point of description of internalisation  or any other acceptable response.  The remaining 3 marks can be awarded to further points, or development of points, of description relating to any of the types of conformity.  Points of description for compliance could include:

Compliance is a change in public behaviour resulting from real of Compliance is where the individual behaves in a way that goes behaviour of others whilst privately disagreeing with them. Compliance is behaviour that is thought to be motivated by rew punishment.  or any other acceptable response.  Points of description for identification could include: Identification is similar to compliance because there is no chan Identification is a level of conformity which is intrinsically satis wishes to be identified with another person that is liked or adm When an individual is identifying with another person's behavio opinions and values and adopt these to be like them, but these strongly held.  or any other acceptable response.  Points of description for internalisation could include: Internalisation is also known as acceptance. This is the level of goes along with group pressure because they believe others to laccordance with this belief. Internalisation is a deeply held belief that the social influence accordance with the individual's own belief system. Internalisation is a permanent and deeply rooted response to so or any other acceptable response.	ge in privately held beliefs. fying because the individual nired. fur they begin to believe in their opinions and values are not  f conformity where the individual oe right and therefore act in is perceived to be right and in

Question	Expected response	Max mark	Specific marking instructions for each question
3	The candidate is expected to evaluate the strengths and weaknesses of Milgram's studies.	8	Candidates can be awarded the 8 marks in a number of ways.  1 mark can be awarded for each point, or development of a point, of evaluation of Milgram's studies.  A maximum of 5 marks can be awarded if the evaluation refers only to strengths or only to weaknesses of the studies.  Points of evaluation could include:  Strengths  Milgram's initial findings were strengthened by carrying out variations of the original study. In the subsequent studies Milgram altered the situation (Independent Variable) to measure the effects on behaviour/obedience (Dependent Variable).  Milgram was able to exert control over the variables, which gives greater validity to the results.  Milgram debriefed participants thoroughly and also arranged for them to be followed up to ensure that the experiment did not cause them harm.  Or any other acceptable response.  Weaknesses  The participants in Milgram's original study were all self-selecting males, which is not a representative sample group.  Milgram's studies involved deception, where participants believed they were giving electric shocks to a real person.  The experiment exposed participants to harm because they experienced stress when administering shocks to the learner.  A limitation of Milgram's research study is that it cannot be replicated for ethical reasons.  It is not possible to test whether people would behave differently now than they did in 1963 or whether women would behave differently to the men in the study.  Or any other acceptable response.

# [END OF SPECIMEN MARKING INSTRUCTION]