



.....[10]

4 From the Schachter and Singer study (two factors in emotion): 9990/11/O/N/18

(a) Describe the psychological theory that was being tested in this study.

.....[3]

(b) Identify **one** ethical issue raised in this study.

.....[1]



(b) Explain whether each guideline below was broken in the study by Schachter and Singer (two factors in emotion):

- confidentiality
- debriefing
- deception
- protection

confidentiality

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.....

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debriefing

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deception

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protection

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..... [8]

7 From the study by Schachter and Singer (two factors in emotion): 9990/12/M/J/19

(a) Outline what the participants in the 'Epinephrine Ignorant (EPI IGN)' group were told during their injection.

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..... [2]



(b) Describe the results from the Activity Index measure in the Euphoria condition for the 'Epinephrine Ignorant (EPI IGN)' group compared to the 'Epinephrine Misinformed (EPI MIS)' group. You must use data in your answer.

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..... [3]

8 From the study by Schachter and Singer (two factors in emotion): 9990/13/M/J/19

(a) Outline **one** aim of the study.

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..... [2]

(b) Describe what the participants in the epinephrine-misinformed (Epi-Mis) condition were told immediately after agreeing to the injection.

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..... [3]

9990/11/O/N/19

9 (a) Describe **two** independent variables from the study by Schachter and Singer (two factors in emotion).

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(b) Describe the results from the Activity Index in the euphoria condition for the Epinephrine Informed (Epi Inf) group compared to the Epinephrine Misinformed (Epi Mis) groups. You **must** use data in your answer.

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..... [3]

16 From the study by Schachter and Singer (two factors in emotion): 9990/13/O/N/20

(a) Two stooges were used to manipulate emotional states. One of these stooges attempted to manipulate euphoria.

Name the other emotional state manipulated in this study.

..... [1]

(b) Name **two** categories an observer used to code the participants' behaviour during the euphoria conditions.

1

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2

..... [2]

(c) Outline **one** conclusion from this study.

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..... [2]



- 17 (a) Outline what is meant by the nature–nurture debate, using any examples. 9990/12/F/M/21
Do **not** refer to the study by Schachter and Singer (two factors in emotion) in your answer.

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..... [4]

- (b) Explain how **one** result from the study by Schachter and Singer (two factors in emotion) supports the nature side of the nature–nurture debate and how **one** result supports the nurture side of the nature–nurture debate.

Result that supports the nature side of the debate:
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Explain how:
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.....

Result that supports the nurture side of the debate:
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A series of horizontal dotted lines spanning the width of the page, providing a template for writing or drawing.



8(a)(ii)	<p>State <u>one</u> of the questions that was used to measure physical condition, including the answer choices.</p> <p>1 mark for the question and 1 mark for indication of answers participants could choose from</p> <p>e.g. Physical condition Q. Have you experienced any palpitation (consciousness of your own heart beat)? Four choices from 'not at all' to 'an intense amount'. Q. Did you feel and tremor? Four choices from 'not at all' to 'an intense amount'.</p> <p>Accept the Epi MIS only questions of: Did you feel numbness in your feet? Did you feel any itching sensation? Did you experience any feeling of headache? (all same four choices as above)</p>	2
8(b)	<p>Explain <u>one</u> similarity and <u>one</u> difference between the Schachter and Singer study and <u>one</u> other core study from the biological approach.</p> <p>4 marks available for the similarity 4 marks available for the difference</p> <p>Other core studies from the biological approach are Canli et al. or Dement and Kleitman. Any other study = 0 marks unless clearly from the approach.</p> <p>Similarities:</p> <ul style="list-style-type: none"><input type="checkbox"/> Both experimental<input type="checkbox"/> Both examined emotions<input type="checkbox"/> Ratings of emotions from questionnaire/being asked <p>Differences:</p> <ul style="list-style-type: none"><input type="checkbox"/> Sample size/characteristics<input type="checkbox"/> Invasive/non-invasive<input type="checkbox"/> Generalisability<input type="checkbox"/> Equipment used (brain scan vs questionnaire)<input type="checkbox"/> Stooge vs no stooge	8



	<p>For the similarity and for the difference (2 × 4 marks):</p> <p>Level 4 (4 marks)</p> <ul style="list-style-type: none"> <input type="checkbox"/> The candidate has explained one similarity/difference between the Schachter and Singer study and one other biological study. <input type="checkbox"/> Accurate knowledge and understanding is applied. <input type="checkbox"/> There is a clear line of reasoning which is logically structured and thoroughly evaluated. <p>Level 3 (3 marks)</p> <ul style="list-style-type: none"> <input type="checkbox"/> The candidate has given one similarity/difference between the Schachter and Singer study and one other biological study. <input type="checkbox"/> Knowledge and understanding is applied. <input type="checkbox"/> There is evidence of some structured reasoning and some evaluation. <p>Level 2 (2 marks)</p> <ul style="list-style-type: none"> <input type="checkbox"/> The candidate has given one similarity/difference between the Schachter and Singer study and one other biological study. <input type="checkbox"/> Some evidence that knowledge and understanding is applied but this may be limited. <input type="checkbox"/> There is evidence of some reasoning with limited evaluation. <p>Level 1 (1 mark)</p> <ul style="list-style-type: none"> <input type="checkbox"/> The candidate has given one similarity/difference between the Schachter and Singer study and one other biological study. <p>OR</p> <ul style="list-style-type: none"> <input type="checkbox"/> The candidate has given one evaluation point that is basic. <p>Level 0 (0 marks) No response worthy of credit.</p>	
2	<p>6(a) In the study by Schachter and Singer (two factors in emotion), the anger condition used a stooge and a questionnaire.</p> <p>Describe the procedure in the anger condition after the participants met the stooge.</p> <p>1 mark per correct point made</p> <p>They were told by the experimenter that he would be back in 20 minutes; The stooge complains about the questionnaire with statements about it being unfair; Annoyed at being given shots [injections]; The stooge began to show anger; The questions begin with 'innocent' ones before getting more personal; The stooge 'paces' his answers to match that of the participant; The stooge makes standardised comments about various questions; The comments begin with 'innocent' comments but get increasingly hostile; He crumples up the questionnaire (at the end); (At the end) he stamps out of the room; The participants' behaviours were observed through a one-way mirror; Their behaviour was placed into categories/six categories were used.</p> <p>1 mark can be given for an example of a stooge comment and 1 mark for any of the set questions asked in the questionnaire.</p>	5



6(b)	<p>Explain <u>one</u> reason why the procedure was standardised in this study.</p> <p>It would allow the study to be more easily replicated (1 mark) Therefore, it could be tested for reliability (1 mark) For example having standardised prompts/behaviours for the stooge means exact replication is possible (1 mark)</p> <p>It would increase the (internal) validity of the study (1 mark) Therefore, cause and effect are (more) likely to be seen (1 mark) For example knowing it was 'injection information' causing behavioural changes (1 mark)</p> <p>It can help to reduce extraneous/uncontrolled variables (1 mark) So that we know it is probably the IV of information about the injection [any named one] (1 mark) causing the change in pulse rate/side effects/behaviours shown – the DV (1 mark)</p>	3
9	<p>Evaluate the Schachter and Singer study (two factors in emotion) in terms of <u>two</u> strengths and <u>two</u> weaknesses. At least <u>one</u> of your evaluation points <u>must</u> be about the use of independent measures.</p> <p>Example of evaluation in context: The study breaks the ethical guideline of no deception. The participants believed that they were being given a vitamin injection called Suproxin – it was in fact epinephrine. They also believed that the stooge was another real participant. Therefore, the participants were deceived at least twice in the study.</p> <p>Other aspects that can be used for evaluation include: use of quantitative data, ethics (positive and negative), usefulness, use of qualitative data, reliability etc. These can be used as one strength and/or one weakness.</p> <div data-bbox="342 1119 1122 1325"><p>Level 4 (8–10 marks)</p><ul style="list-style-type: none"><input type="checkbox"/> Evaluation is comprehensive.<input type="checkbox"/> Answer demonstrates evidence of careful planning, organisation and selection of material.<input type="checkbox"/> Analysis (valid conclusions that effectively summarise issues and arguments) is evident throughout.<input type="checkbox"/> Answer demonstrates an excellent understanding of the material.</div> <div data-bbox="342 1329 1122 1476"><p>Level 3 (6–7 marks)</p><ul style="list-style-type: none"><input type="checkbox"/> Evaluation is good.<input type="checkbox"/> Answer demonstrates some planning and is well organised.<input type="checkbox"/> Analysis is often evident but may not be consistently applied.<input type="checkbox"/> Answer demonstrates a good understanding of the material.</div>	10

3



<p>Level 2 (4–5 marks)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Evaluation is mostly appropriate but limited. <input type="checkbox"/> Answer demonstrates limited organisation or lacks clarity. <input type="checkbox"/> Analysis is limited. <input type="checkbox"/> Answer lacks consistent levels of detail and demonstrates a limited understanding of the material.
<p>Level 1 (1–3 marks)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Evaluation is basic. <input type="checkbox"/> Answer demonstrates little organisation. <input type="checkbox"/> There is little or no evidence of analysis. <input type="checkbox"/> Answer does not demonstrate understanding of the material.
<p>Level 0 (0 marks)</p> <p>No response worthy of credit.</p>

4	<p>2(a) From the Schachter and Singer study (two factors in emotion):</p> <p>Describe the psychological theory that was being tested in this study.</p> <p>1 mark per correct point made x3</p> <p>e.g. Physiological + cognitive (1 mark) Cognitions arising from a situation can be interpreted via past experiences and this allows us to understand/label the emotion; When someone experiences an emotion, physiological arousal happens; They need a cue to be able to label the physiological arousal; This may result in misinterpretations of the emotion as it is based on the physiological arousal</p>	3
	<p>2(b) Identify <u>one</u> ethical issue raised in this study.</p> <p>1 mark for an appropriate issue</p> <p>e.g. Deception/participants were deceived; Lack of physical protection; Lack of psychological protection; Lack of confidentiality; Lack of informed consent</p>	1
5	<p>7(a) From the Schachter and Singer study (two factors in emotion):</p> <p>Identify the sampling technique used in this study.</p> <p>1 mark for correct answer</p> <p>Volunteer/self-selected;</p>	1
	<p>7(b) Describe how the sample was recruited in this study.</p> <p>1 mark per correct point x3</p> <p>e.g. The study was advertised to students who were part of a participant pool; They were volunteers from introductory (psychology) classes / at Minnesota University;</p> <p>They were to receive (two) extra points; All (volunteers) were cleared with the Student Health Service; This was to ensure no harmful effects.</p>	3
	<p>7(c) Outline <u>one</u> strength of the sampling technique as used in this study.</p> <p>1 mark for strength, 1 mark for linking it to the study</p> <p>Volunteers tend to be more motivated and therefore are less likely to drop out of the study (1 mark). Therefore, the participants were more likely to agree to the injection part of the study (1 mark).</p> <p>As they were volunteers there was no issue around giving informed consent (1 mark).</p>	2



6

9(a)	<p>Describe <u>two</u> aims of the study by Schachter and Singer (two factors in emotion).</p> <p>1 mark for brief aim 2 marks for detailed aim 2 marks available per aim</p> <p>e.g. 1 mark To test out the two factor theory of emotion To test out the role of cognitive labels in emotions To test out the role of physiology in emotions To investigate the effect of a stooge on behaviour</p> <p>e.g. 2 marks To test out the two factor theory of emotion which is that an emotional experience comes from a cognitive label and some physiological arousal To test out how cognitive labels like anger and euphoria affect how we perceive our own emotions To test that when physiologically aroused and there <i>is no</i> immediate explanation for it; do we describe feelings based on available cognitions? To test that when physiologically aroused and there <i>is an</i> immediate explanation for it, we do not use available cognitions to explain it To test given the same cognitive circumstances, will an individual describe their feelings as emotions only when they experience physiological arousal? To investigate the effect of a stooge on behaviour who would be angry or euphoric</p>	4
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9(b)	<p>Explain whether each guideline below was broken in the study by Schachter and Singer (two factors in emotion):</p> <p><input type="checkbox"/> confidentiality <input type="checkbox"/> debriefing <input type="checkbox"/> deception <input type="checkbox"/> protection</p> <p>Use the following Levels marking for each guideline <u>separately</u></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Level</th> <th style="width: 70%;">Descriptor</th> <th style="width: 20%;">Marks</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">2</td> <td>The answer explicitly describes the ethical guideline <i>and</i> the example is contextualised from the named study OR The ethical guideline is <i>implicit</i> from the use of a well argued example contextualised from the named study</td> <td style="text-align: center;">2</td> </tr> <tr> <td style="text-align: center;">1</td> <td>The answer explicitly describes the ethical <i>without</i> correct contextualisation/no contextualisation OR The ethical guideline is <i>implicit</i> from the use of a brief example contextualised from the named study OR The ethical guideline is incorrectly described but the contextualised example from the named study is correct</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="text-align: center;">0</td> <td>The description of the ethical guideline is incorrect and/or the contextualised example is incorrect OR no answer given</td> <td style="text-align: center;">0</td> </tr> </tbody> </table> <p>Confidentiality e.g. Any data should not be identifiable as a single participants' responses/participants' data must not be named as theirs All we know is that there were male students from the University of Minnesota/only the doctors had access to their medical records</p> <p>Debriefing e.g. After a study has been completed, participants should be told about the true aim of the study/what deception/occurred This guideline was not broken as after the self-report, the researchers explained the deception of the injection/stooge/answered any questions</p>	Level	Descriptor	Marks	2	The answer explicitly describes the ethical guideline <i>and</i> the example is contextualised from the named study OR The ethical guideline is <i>implicit</i> from the use of a well argued example contextualised from the named study	2	1	The answer explicitly describes the ethical <i>without</i> correct contextualisation/no contextualisation OR The ethical guideline is <i>implicit</i> from the use of a brief example contextualised from the named study OR The ethical guideline is incorrectly described but the contextualised example from the named study is correct	1	0	The description of the ethical guideline is incorrect and/or the contextualised example is incorrect OR no answer given	0	8
Level	Descriptor	Marks												
2	The answer explicitly describes the ethical guideline <i>and</i> the example is contextualised from the named study OR The ethical guideline is <i>implicit</i> from the use of a well argued example contextualised from the named study	2												
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0	The description of the ethical guideline is incorrect and/or the contextualised example is incorrect OR no answer given	0												



	<p>Deception e.g. A participant should not be deceived without a strong justification/only if revealing the deception would not cause discomfort This guideline was broken as they were told the wrong information whilst getting the injection</p>	
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7

2(a)	<p>From the study by Schachter and Singer (two factors in emotion):</p> <p>Outline what the participants in the 'Epinephrine Ignorant (EPI IGN)' were told during their injection.</p> <p>1 mark per correct point made</p> <p>They were told that the injection/drug was mild/harmless; They were told that there were no side effects.</p>	2
2(b)	<p>Describe the results from the Activity Index measure in the Euphoria condition for 'Epinephrine Ignorant (EPI IGN)' group compared to the Epinephrine Misinformed (EPI MIS) group. You must use data in your answer</p> <p>1 mark for stating which group scored highest/lowest 1 mark for describing what the result meant 1 mark for using data (can be just the data for one group)</p> <p>e.g. The score on the Activity Index was higher for the Epi Mis/lower for the Epi Ign (1 mark) which meant the Epi Mis joined in more with the stooge or were more euphoric/Epi Ign joined in less or were less euphoric (1 mark). The average score was 22.56 (Epi Mis) and 18.28 (Epi Ign) (1 mark for either)</p>	3

8

1(a)	<p>From the study by Schachter and Singer (two factors in emotion):</p> <p>Outline <u>one</u> aim of the study.</p> <p>2 marks detailed aim; 1 mark partial / brief aim.</p> <p>e.g. To test out the two factor theory of emotion (1 mark); To test out the two factor theory of emotion which is that an emotional experience comes from a cognitive label and some physiological arousal (2 marks); To test out the role of cognitive labels in emotions (1 mark).</p>	2
1(b)	<p>Describe what the participants in the epinephrine-misinformed (Epi-Mis) condition were told immediately after agreeing to the injection.</p> <p>1 mark per correct point.</p> <p>They were told to expect some side effects (from Suproxin); The side effects would be short-lived / transitory; The side effect would last for 15–20 minutes; Your feet will probably go numb; You will get an itching sensation over your body; You may get a headache.</p>	3



9

9(a)	<p>Describe <u>two</u> independent variables from the study by Schachter and Singer (two factors in emotion).</p> <p>1 mark for identifying an IV, ×2 1 mark for operationalising the IV, ×2</p> <p>The emotional situation (1 mark); anger or euphoria (1 mark); The injection information (1 mark); misinformed/informed/ignorant/placebo (1 mark for any two of these);</p>	4
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9(b)	<p>Explain <u>two</u> differences between the study by Schachter and Singer (two factors in emotion) and the study by Canli et al. (brain scans and emotions).</p> <p>e.g. 4 marks They used different sexes as participants. Schachter and Singer used 184 male students from the University of Minnesota whereas Canli only used 10 females who were all right-handed.</p> <p>e.g. 3 marks They used different sexes as participants. Schachter and Singer used (184) male students from the University of Minnesota whereas Canli only used females.</p> <p>e.g. 2 marks They used different sexes as participants. Schachter and Singer used males whereas Canli used females.</p> <p>e.g. 1 mark They used different sexes as participants.</p>	8
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Level	Criteria for each result	Marks
4	The difference is well explained using both studies as examples.	4
3	The difference is well explained but only one study is used as an example OR both studies used briefly.	3
2	The difference is brief with an attempt at using at least one study as an example OR The difference is well explained but there is no study evidence.	2
1	The difference is brief with no attempt at using studies as examples.	1
0	No creditworthy material.	0



10	8	<p>Two friends, Lok and Hiruni, are discussing the ethics of the study by Schachter and Singer (two factors in emotion). Lok thinks the study is ethical but Hiruni thinks it is unethical.</p> <p>Explain <u>one</u> reason why Lok is correct and <u>one</u> reason why Hiruni is correct, using evidence from this study.</p> <p>3 marks for the answer for Lok 3 marks for the answer for Hiruni</p> <p>e.g. Lok Data collected was kept confidential (1 mark). No individual data was published (1 mark) as all we know is that there were male students from the University of Minnesota (1 mark).</p> <p>e.g. Hiruni The participants were deliberately deceived (1 mark). They were told the wrong information whilst getting the injection (1 mark). For example one group was told that they would experience numb feet/get a headache after the injection (1 mark)/told it was Suproxin for vision (alternative 1 mark).</p>	6
11	5(a)	<p>From the study by Schachter and Singer (two factors in emotion):</p> <p>Identify <u>two</u> behaviours from participants in the euphoria condition that would be coded as 'joins in activity'.</p> <p>1 mark per correct behaviour named</p> <p>Made or flew paper airplanes; Threw paper basketballs; Hula hooped; Shooting at pile of folders; Shoots paper with rubber band;</p>	2
	5(b)	<p>Explain <u>one</u> methodological strength of this study.</p> <p>1 mark – identifying strength 1 mark – relating it directly to the study</p> <p>The study was experimental (well controlled) so cause and effect could be established (1 mark); They could be confident that it was the (mis)information given to the participants that was causing their thoughts and behaviours (1 mark);</p> <p>The study was standardised so that it could easily be tested for reliability (1 mark); The actions of the stooge in the anger and euphoria conditions meant that another research team could replicate and check for reliability (1 mark);</p>	2



12

5	<p>Mark wants to replicate the Epinephrine Informed (Epi Inf) condition from the study by Schachter and Singer (two factors in emotion) and needs your help. You must produce clear instructions for Mark, from when the participant arrives until they are given the injection.</p> <p>Suggest instructions that Mark could use to replicate this part of the study.</p> <p>1 mark per correct instruction.</p> <p>Max 3 for instructions given that are not specific to the Epi Inf condition.</p> <p>General: You must tell the participant that the study is about vision; You must tell them that it is about how vitamins affect vision; You must tell them that a vitamin compound/Suproxin is being assessed; You must then gain their permission to be injected (with Suproxin); You must tell them that the injection is mild/harmless;</p> <p>Epi Inf specific: You must also tell them/reveal that there may be side effects; Tell them that they are short-lived; Tell them they will last about 15 minutes or so; Tell them that their hand will begin to shake/heart will pound/face may get warm;</p>	5
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13

5	<p>Adelia wants to replicate the Epinephrine Misinformed (Epi Mis) condition from the study by Schachter and Singer (two factors in emotion) and needs your help. You must produce clear instructions for Adelia, from when the participant arrives until they are given the injection.</p> <p>Suggest instructions that Adelia could use to replicate this part of the study.</p> <p>1 mark per correct instruction.</p> <p>Max 3 for instructions given that are not specific to the Epi Mis condition.</p> <p>General: You must tell the participant that the study is about vision; You must tell them that it is about how vitamins affect vision; You must tell them that a vitamin compound/Suproxin is being assessed; You must then gain their permission to be injected (with Suproxin); You must tell them that the injection is mild/harmless;</p> <p>Epi Mis specific: You must also tell them/reveal that there may be side effects; Tell them that they are short-lived; Tell them they will last about 15 minutes or so; Tell them that their feet will feel numb/itching sensation/might get a slight headache;</p>	5
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14	5	<p>Maria wants to replicate the Epinephrine Ignorant (Epi Ign) condition from the study by Schachter and Singer (two factors in emotion) and needs your help. You must produce clear instructions for Maria, from when the participant arrives until they are given the injection.</p> <p>Suggest instructions that Maria could use to replicate this part of the study.</p> <p>1 mark per correct instruction.</p> <p>Max 3 for instructions given that are not specific to the Epi Ign condition.</p> <p>General: You must tell the P that the study is about vision; You must tell them that it is about how vitamins affect vision; You must tell them that a vitamin compound/Suproxin is being assessed; You must then gain their permission to be injected (with Suproxin); You must tell them that the injection is mild/harmless;</p> <p>Epi Ign specific: You must not tell them about any side effects; You must then leave the room; You must remind the physician to re-iterate no side effects/harmless/mild;</p>	5
15	2	<p>In the euphoria condition in the study by Schachter and Singer (two factors in emotion), a stooge performed a series of standardised behaviours. An observer categorised any behaviours shown by the participant. One category was 'initiates new activity'.</p>	
	2(a)(i)	<p>Outline how the category of 'initiates new activity' was operationalised in this study.</p> <p>1 mark per correct point</p> <p>If the participant gave creative euphoria; That is, they initiated euphoric behaviour outside of the stooge's routine; Therefore, the behaviour had to be one that had never been seen by the participant (from the stooge).</p>	2
	2(a)(ii)	<p>Name <u>one</u> behaviour shown by a participant in this study that was categorised as 'initiates new activity'.</p> <p>1 mark for correct answer.</p> <p>(Threw) open the window; Laughing; Throwing paper basketballs; Hula hooped (on neck and leg).</p>	1



2(b)	<p>Describe the results from the Activity Index in the euphoria condition for the Epinephrine Informed (Epi Inf) group compared to the Epinephrine Misinformed (Epi Mis) group. You <u>must</u> use data in your answer.</p> <p>3 marks = comparison result with correct data 2 marks = comparison result with incorrect data/no data 1 mark = one result (e.g. for just for EPI-INF)</p> <p>e.g. 3 marks: The EPI-INF scored lower with a score of 12 compared to the EPI-MIS with a score of 22.</p> <p>e.g. 2 marks: The EPI-INF scored lower on the index compared to the EPI-MIS; The EPI-MIS scored higher on the index compared to the EPI-INF.</p> <p>e.g. 1 mark: The EPI-MIS scored the higher/The EPI-INF scored lower.</p>	3
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16

1	<p>From the study by Schachter and Singer (two factors in emotion):</p>	
1(a)	<p>Two stooges were used to manipulate emotional states. One of these stooges attempted to manipulate euphoria.</p> <p>Name the other emotional state manipulated in this study.</p> <p>1 mark for correct answer</p> <p>Anger/angry.</p>	1
1(b)	<p>Name <u>two</u> categories an observer used to code the participants' behaviour during the euphoria conditions.</p> <p>1 mark per correct category named</p> <p>Joins in activity; Initiates new activity; Ignores stooge; Watches stooge.</p>	2
1(c)	<p>Outline <u>one</u> conclusion from this study.</p> <p>2 marks = full conclusion 1 mark = partial conclusion 0 marks = purely results</p> <p>e.g.:</p> <p>There are two factors involved when we experience emotions: a physiological/biological one and a psychological/cognitive one (2 marks);</p> <p>The findings supported the two-factor theory of emotion (1 mark);</p> <p>The highest pulse rate change was in the anger condition with EPI-IGN (0 marks).</p>	2



17

8(a)	<p>Outline what is meant by the nature versus nurture debate, using any examples. Do <u>not</u> refer to the study by Schachter and Singer (two factors in emotion) in your answer.</p> <p>1 mark = defining nature + 1 mark example (non-Schachter & Singer) 1 mark = defining nurture + 1 mark example (non-Schachter & Singer)</p> <p>e.g. Nature means a behaviour that we are born with/genetic/hard-wired (1 mark). For example, a person may be born with genetics that cause them to develop schizophrenia (1 mark) Nurture means a behaviour that has been learned by an organism after birth (1 mark); For example, in the Pepperberg study, Alex the parrot learned the concept of Same/Different (1 mark);</p> <p>There are other creditworthy responses.</p>	4
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8(b)	<p>Explain how <u>one</u> result from the study by Schachter and Singer (two factors in emotion) supports the nature side of the nature-nurture debate and how <u>one</u> result supports the nurture side of the nature-nurture debate.</p> <p>e.g. Nature 4 marks In all of the epinephrine conditions, the pulse rate increased for all participants. This is a biological reaction as it is a hormone being released into the blood stream/humans are 'hard-wired' to react to epinephrine in this way.</p> <p>e.g. Nurture 4 marks In the euphoria condition, the misinformed group produced the highest activity index score compared to all other groups. This is because the participants may have been choosing environmental/behavioural cues to explain their feelings so acted in this way to as a result of external forces.</p>	8																		
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Level</th> <th style="width: 50%;">Criteria</th> <th style="width: 40%;">Marks</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">4</td> <td>The result presented has a meaningful comparison and the candidate clearly explains why it supports/does not support the named concept</td> <td style="text-align: center;">4</td> </tr> <tr> <td style="text-align: center;">3</td> <td>The result presented has a meaningful comparison and there is a brief attempt at explaining why it supports/does not support the named concept The result presented has no meaningful comparison but the candidate clearly explains why it supports/does not support the named concept</td> <td style="text-align: center;">3</td> </tr> <tr> <td style="text-align: center;">2</td> <td>The result presented has a meaningful comparison but there is no attempt at explanation; The result presented is not clear but there is an implicit attempt at explaining why it supports/does not support the named concept</td> <td style="text-align: center;">2</td> </tr> <tr> <td style="text-align: center;">1</td> <td>The result presented has no meaningful comparison or there is a basic attempt at explaining</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="text-align: center;">0</td> <td>No creditworthy answer</td> <td style="text-align: center;">0</td> </tr> </tbody> </table>			Level	Criteria	Marks	4	The result presented has a meaningful comparison and the candidate clearly explains why it supports/does not support the named concept	4	3	The result presented has a meaningful comparison and there is a brief attempt at explaining why it supports/does not support the named concept The result presented has no meaningful comparison but the candidate clearly explains why it supports/does not support the named concept	3	2	The result presented has a meaningful comparison but there is no attempt at explanation; The result presented is not clear but there is an implicit attempt at explaining why it supports/does not support the named concept	2	1	The result presented has no meaningful comparison or there is a basic attempt at explaining	1	0	No creditworthy answer	0
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0	No creditworthy answer	0																		



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9	<p>Evaluate the study by Schachter and Singer (two factors in emotion) in terms of <u>two</u> strengths and <u>two</u> weaknesses. At least one of your evaluation points <u>must</u> be about the use of quantitative data.</p> <p>Suitable strengths include: quantitative data, internal validity, reliability Suitable weaknesses include: quantitative data, external validity, generalisability, ethics.</p> <div style="border: 1px solid black; padding: 5px;"><p>Level 4 (8–10 marks)</p><ul style="list-style-type: none">• Evaluation is comprehensive.• Answer demonstrates evidence of careful planning, organisation and selection of material.• Analysis (valid conclusions that effectively summarise issues and arguments) is evident throughout.• Answer demonstrates an excellent understanding of the material.</div> <div style="border: 1px solid black; padding: 5px;"><p>Level 3 (6–7 marks)</p><ul style="list-style-type: none">• Evaluation is good.• Answer demonstrates some planning and is well organised.• Analysis is often evident but may not be consistently applied.• Answer demonstrates a good understanding of the material.</div> <div style="border: 1px solid black; padding: 5px;"><p>Level 2 (4–5 marks)</p><ul style="list-style-type: none">• Evaluation is mostly appropriate but limited.• Answer demonstrates limited organisation or lacks clarity.• Analysis is limited.• Answer lacks consistent levels of detail and demonstrates a limited understanding of the material.</div> <div style="border: 1px solid black; padding: 5px;"><p>Level 1 (1–3 marks)</p><ul style="list-style-type: none">• Evaluation is basic.• Answer demonstrates little organisation.• There is little or no evidence of analysis.• Answer does not demonstrate understanding of the material.</div> <div style="border: 1px solid black; padding: 5px;"><p>Level 0 (0 marks) No response worthy of credit.</p></div>	10
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9	<p>Evaluate the study by Schachter and Singer (two factors in emotion) in terms of <u>two</u> strengths and <u>two</u> weaknesses. At least one of your evaluation points <u>must</u> be about ethics.</p> <p>Suitable strengths include: quantitative data, internal validity, reliability Suitable weaknesses include: quantitative data, external validity, generalisability, ethics</p> <p>Level 4 (8–10 marks)</p> <ul style="list-style-type: none">• Evaluation is comprehensive.• Answer demonstrates evidence of careful planning, organisation and selection of material.• Analysis (valid conclusions that effectively summarise issues and arguments) is evident throughout.• Answer demonstrates an excellent understanding of the material. <p>Level 3 (6–7 marks)</p> <ul style="list-style-type: none">• Evaluation is good.• Answer demonstrates some planning and is well organised.• Analysis is often evident but may not be consistently applied.• Answer demonstrates a good understanding of the material. <p>Level 2 (4–5 marks)</p> <ul style="list-style-type: none">• Evaluation is mostly appropriate but limited.• Answer demonstrates limited organisation or lacks clarity.• Analysis is limited.• Answer lacks consistent levels of detail and demonstrates a limited understanding of the material. <p>Level 1 (1–3 marks)</p> <ul style="list-style-type: none">• Evaluation is basic.• Answer demonstrates little organisation.• There is little or no evidence of analysis.• Answer does not demonstrate understanding of the material. <p>Level 0 (0 marks) No response worthy of credit.</p>	10
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