A-level
PSYCHOLOGY
(7182/2)
Paper 2 Psychology in Context

2017 Morning Time allowed: 2 hours

Materials
For this paper you may have:
• a calculator.

Instructions
• Use black ink or black ball-point pen.
• Fill in the boxes at the bottom of this page.
• Answer all questions. You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
• Do all rough work in this book. Cross through any work you do not want to be marked.

Information
• The marks for questions are shown in brackets.
• The maximum mark for this paper is 96.
• Questions should be answered in continuous prose. You will be assessed on your ability to:
  - use good English
  - organise information clearly
  - use specialist vocabulary where appropriate.

Please write clearly, in block capitals, to allow character computer recognition.
Section A
Approaches in Psychology

Answer all questions in this section

Only one answer per question is allowed.

For each answer completely fill in the circle alongside the appropriate answer.

CORRECT METHOD  
WRONG METHODS  

If you want to change your answer you must cross out your original answer as shown. 

If you wish to return to an answer previously crossed out, ring the answer you now wish to select as shown. 

0 1 1 Which one of the following statements is false? Shade one box only.

A Repression can lead to unpleasant memories causing distress
B Repression causes people to have difficulty accessing unpleasant memories
C Repression involves people choosing to forget unpleasant memories
D Repression involves unpleasant memories being kept from conscious awareness

[1 mark]

0 1 2 Which one of the following statements is false? Shade one box only.

A The Id is responsible for pleasure-seeking behaviour
B The Id is responsible for unreasonable behaviour
C The Superego is responsible for bad behaviour
D The Superego is responsible for guilty feelings

[1 mark]
In a laboratory study of problem-solving, cognitive psychologists asked participants to solve problems presented in different colours of ink. They found that it took longer to solve problems presented in green ink, than it did to solve problems presented in other colours. They inferred that the mental processing of problems is made more difficult when a problem is presented in green ink.

Explain what is meant by ‘inference’ in relation to this study.

[2 marks]

Outline what is meant by ‘congruence’. Explain one way in which Dominic might achieve ‘congruence’.

[4 marks]
Discuss the contribution of behaviourist psychologists such as Pavlov and Skinner to our understanding of human behaviour.

[16 marks]

You may use this space to plan your answer.
Section B
Biopsychology
Answer all questions in this section

Read the item and then answer the questions that follow.

Figure 1 shows the left hemisphere of the human brain. Six areas of cortical specialisation are labelled A, B, C, D, E and F.

Figure 1: Left hemisphere of the human brain

Using your knowledge of localisation of function in the brain, identify the area of cortical specialisation. Shade one box only for each area.

0 5 . 1 Broca's area
A ○ B ○ C ● D ○ E ○ F ○ [1 mark]

0 5 . 2 Somatosensory cortex
A ○ B ○ C ● D ○ E ○ F ○ [1 mark]

0 5 . 3 Visual cortex
A ○ B ○ C ● D ○ E ○ F ○ [1 mark]

0 5 . 4 Wernicke's area
A ○ B ○ C ● D ○ E ○ F ○ [1 mark]

0 5 . 5 Motor cortex
A ○ B ○ C ● D ○ E ○ F ○ [1 mark]
The electroencephalogram (EEG) and event-related potentials (ERPs) both involve recording the electrical activity of the brain.

Outline one difference between the EEG and ERPs. [2 marks]

Read the item and then answer the question that follows.

Sam is a police officer. She has just started working the night shift and after a week, she finds that she has difficulty sleeping during the day and is becoming tense and irritable. Sam is also worried that she is less alert during the night shift itself.

Using your knowledge of endogenous pacemakers and exogenous zeitgebers, explain Sam’s experiences. [4 marks]
The human female menstrual cycle is an example of one type of biological rhythm; it is called a:

A. circadian rhythm  
B. infradian rhythm  
C. ultradian rhythm  

[1 mark]

Outline the structures and processes involved in synaptic transmission.  

[6 marks]

Extra space
Split brain patients show unusual behaviour when tested in experiments. Briefly explain how unusual behaviour in split brain patients could be tested in an experiment. [2 marks]

Briefly evaluate research using split brain patients to investigate hemispheric lateralisation of function. [4 marks]
A psychologist wanted to see if verbal fluency is affected by whether people think they are presenting information to a small group of people or to a large group of people.

The psychologist needed a stratified sample of 20 people. She obtained the sample from a company employing 60 men and 40 women.

The participants were told that they would be placed in a booth where they would read out an article about the life of a famous author to an audience. Participants were also told that the audience would not be present, but would only be able to hear them and would not be able to interact with them.

There were two conditions in the study, **Condition A** and **Condition B**.

**Condition A**: 10 participants were told the audience consisted of 5 listeners.

**Condition B**: the other 10 participants were told the audience consisted of 100 listeners.

Each participant completed the study individually. The psychologist recorded each presentation and then counted the number of verbal errors made by each participant.

Identify the dependent variable in this study. [2 marks]
Write a suitable hypothesis for this study. [3 marks]

Identify one extraneous variable that the psychologist should have controlled in the study and explain why it should have been controlled. [3 marks]

Explain one advantage of using a stratified sample of participants in this study. [2 marks]
Explain how the psychologist would have obtained the male participants for her stratified sample. Show your calculations.

[3 marks]

The psychologist wanted to randomly allocate the 20 people in her stratified sample to the two conditions. She needed an equal number of males in each condition and an equal number of females in each condition. Explain how she would have done this.

[4 marks]
Read the item and then answer the questions that follow.

The results of the study are given in Table 1.

Table 1: Mean number of verbal errors and standard deviations for both conditions

<table>
<thead>
<tr>
<th></th>
<th>Condition A (believed audience of 5 listeners)</th>
<th>Condition B (believed audience of 100 listeners)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>11.1</td>
<td>17.2</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>1.30</td>
<td>3.54</td>
</tr>
</tbody>
</table>

What conclusions might the psychologist draw from the data in Table 1? Refer to the means and standard deviations in your answer.

[6 marks]
Read the item and then answer the question that follows.

The psychologist had initially intended to use the range as a measure of dispersion in this study but found that one person in **Condition A** had made an exceptionally low number of verbal errors.

Explain how using the standard deviation rather than the range in this situation, would improve the study.

[3 marks]

Name an appropriate statistical test that could be used to analyse the number of verbal errors in **Table 1**. Explain why the test you have chosen would be a suitable test in this case.

[4 marks]
The psychologist found the results were significant at $p<0.05$. What is meant by ‘the results were significant at $p<0.05$’?

[2 marks]

Briefly explain one method the psychologist could use to check the validity of the data she collected in this study.

[2 marks]

Briefly explain one reason why it is important for research to undergo a peer review process.

[2 marks]

Section C continues on the next page
Read the item and then answer the question that follows.

The psychologist focused on fluency in spoken communication in her study. Other research has investigated sex differences in non-verbal behaviours such as body language and gestures.

Design an observation study to investigate sex differences in non-verbal behaviour of males and females when they are giving a presentation to an audience.

In your answer you should provide details of:

- the task for the participants
- the behavioural categories to be used and how the data will be recorded
- how reliability of the data collection might be established
- ethical issues to be considered.

[12 marks]

You may use this space to plan your answer.

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END OF QUESTIONS
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