

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** Complete the following sentence. Shade **one** box only.

Sensory neurons carry information

A away from the brain.

B both to and from the brain.

C towards the brain.

D within the brain.

[1 mark]

0 1 . **2** Complete the following sentence. Shade **one** box only.

The somatic nervous system

A comprises of two sub-systems.

B connects the central nervous system and the senses.

C consists of the brain and spinal cord.

D controls involuntary responses.

[1 mark]

0 2

Which **one** of the following responses results from the action of the sympathetic division of the autonomic nervous system? Shade **one** box only.

A Decreased pupil size

B Increased digestion

C Increased heart rate

D Increased salivation

[1 mark]

0 3

Label the **two** areas of the synapse in **Figure 1** by putting the appropriate letter in each box.

A Axon

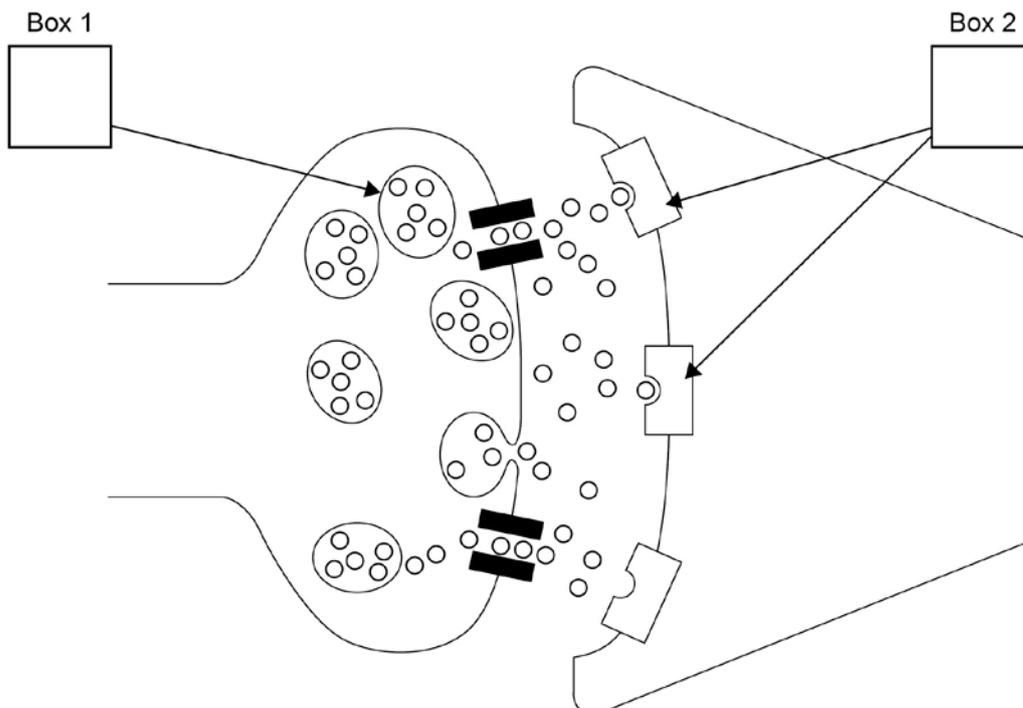
B Dendrites

C Neurotransmitters

D Receptor sites

E Vesicle

Figure 1: The synapse



[2 marks]

0 4

Read the item and then answer the question that follows.

Psychologists investigating theoretical models of cognitive processing study human cognitive processing. They sometimes give participants problems to solve then ask them about the experience afterwards. Typical participant responses are as follows:

Response A: 'There were too many things to think about at the same time.'

Response B: 'I had to do one task at a time, then do the next task, and so on.'

Briefly suggest how **each** of these responses might inform psychologists investigating models of human cognitive processing.

[2 marks]

0 5

Read the item and then answer the questions that follow.

A behaviourist researcher studying reinforcement carried out a laboratory experiment. He put a cat in a puzzle box. The cat was able to escape from the puzzle box by pulling on a string which opened the door. Each time the cat escaped it was given a food treat. At first, the cat escaped quite slowly, but with each attempt the escape time decreased.

0 5

. 1

Explain which type of conditioning is being investigated in this experiment?

[2 marks]

0 5

Read the item and then answer the questions that follow.

The data from the laboratory experiment are shown in **Table 1**.

Table 1: Time taken for the cat to escape from the puzzle box

Attempt	Time taken for the cat to escape from the puzzle box (seconds)
1	63
2	60
3	45
4	37
5	18
6	15
7	5
8	3

0 5

. 2

Calculate the mean time taken for the cat to escape from the puzzle box. Show your calculations.

[2 marks]

0 5

. 3

The researcher compared the time taken for the cat to escape at the first attempt, with the time taken for the eighth attempt. He found that after learning had taken place the cat's escape time was: Shade **one** box only.

A 9 times faster than it was at the start.

B 11 times faster than it was at the start.

C 15 times faster than it was at the start.

D 21 times faster than it was at the start.

[1 mark]

Section B**Psychopathology**Answer **all** questions in this section**0 7**

Read the item and then answer the questions that follow.

Researchers analysed the behaviour of over 4000 pairs of twins. The results showed that the degree to which obsessive-compulsive disorder (OCD) is inherited is between 45% and 65%.

0 7**1**

Distinguish between obsessions and compulsions.

[2 marks]

0 7**2**

With reference to the study described above, what do the results seem to show about possible influences on the development of OCD?

[4 marks]

0 8

Read the item and then answer the question that follows.

Steven describes how he feels when he is in a public place.

'I always have to look out for people who might be ill. If I come into contact with people who look ill, I think I might catch it and die. If someone starts to cough or sneeze then I have to get away and clean myself quickly.'

Outline **one cognitive** characteristic of OCD and **one behavioural** characteristic of OCD that can be identified from the description provided by Steven.

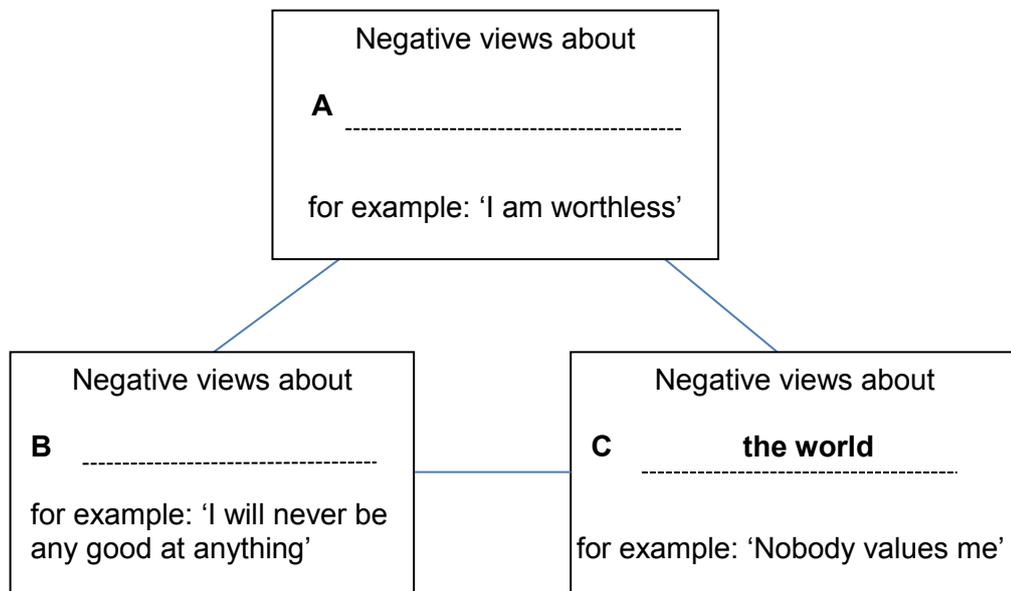
[2 marks]

0 9

Complete **Figure 2**, below, by filling in **A** and **B**, to show Beck's negative triad as it is used to explain depression.

[2 marks]

Figure 2: Beck's negative triad



Section C

Research methods

Answer **all** questions in this section

1 2

Read the item and then answer the questions that follow.

A psychologist wanted to see if creativity is affected by the presence of other people. To test this he arranged for 30 people to participate in a study that involved generating ideas for raising funds for a local youth club. Participants were randomly allocated to one of two conditions.

Condition A: there were 15 participants in this condition. Each participant was placed separately in a room and was given 40 minutes to think of as many ideas as possible for raising funds for a local youth club. The participant was told to write down his or her ideas and these were collected in by the psychologist at the end of the 40 minutes.

Condition B: there were 15 participants in this condition. The participants were randomly allocated to 5 groups of equal size. Each group was given 40 minutes to think of as many ideas as possible for raising funds for a local youth club. Each group was told to write down their ideas and these were collected by the psychologist at the end of the 40 minutes.

The psychologist counted the number of ideas generated by the participants in both conditions and calculated the total number of ideas for each condition.

Table 2: Total number of ideas generated in Condition A (when working alone) and in Condition B (when working in a group)

	Condition A Working alone	Condition B Working in a group
Total number of ideas generated	110	75

1 2

1

Identify the experimental design used in this study **and** outline **one** advantage of this experimental design.

[3 marks]

1 2 . **2** Describe **one other** experimental design that researchers use in psychology. **[2 marks]**

1 2 . **3** Apart from using random allocation, suggest **one** way in which the psychologist might have improved this study by controlling for the effects of extraneous variables. Justify your answer. **[2 marks]**

1 2 . **4** Write a suitable hypothesis for this study. **[3 marks]**

1 2 . **5** From the information given in the description, calculate the number of participants in each group in **Condition B**. **[1 mark]**

1 2

Read the item and then answer the questions that follow.

The psychologist noticed that the number of ideas generated by each of the individual participants in **Condition A** varied enormously whereas there was little variation in performance between the 5 groups in **Condition B**. He decided to calculate a measure of dispersion for each condition.

1 2**6**

Name a measure of dispersion the psychologist could use.

[1 mark]

1 2**7**The psychologist uses the measure of dispersion you have named in your answer to **question 12.6**. State how the result for each condition would differ.**[1 mark]**

1 2**8**Explain how the psychologist could have used random allocation to assign the 15 participants in **Condition B** into the 5 groups.**[3 marks]**

1 2

Read the item and then answer the questions that follow.

This is a repeat of information given on page 12.**Table 2: Total number of ideas generated in Condition A (when working alone) and in Condition B (when working in a group)**

	Condition A Working alone	Condition B Working in a group
Total number of ideas generated	110	75

1 2**9**Using the information given in **Table 2**, explain how the psychologist could further analyse the data using percentages.**[2 marks]**

Section C continues on the next page

