



# A Level Psychology H567/01 Research methods

# Sample Question Paper

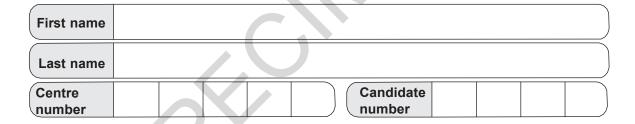
# Date - Morning/Afternoon

Time allowed: 2 hours

#### You must have:

- · A scientific or graphical calculator
- No additional materials are required for this Question Paper





#### **INSTRUCTIONS**

- Use black ink.
- Answer all the questions.
- Write your answer to each question in the space provided.
- Do not write in the bar codes.

#### **INFORMATION**

- The total mark for this paper is 90.
- The marks for each question are shown in brackets [ ].
- Quality of extended responses will be assessed in questions marked with an asterisk (\*).
- This document consists of 24 pages.



## **SECTION A: Multiple choice**

Answer **all** the questions.

1	Wh	ich is the name of a type of interview?	
	Α	closed	
	В	likert	
	С	quasi	
	D	structured	
	You	ur answer	[1]
2	Loc	ok at the following academic reference:	
		avin, I.M., Rodin, J.A. & Piliavin, J. (1969) Good Samaritanism: An underground phenomeno urnal of Personality and Social Psychology 13.	n?
	Wh	at is the error in this Harvard style reference?	
	A	the date of the study should be at the end of the reference	
	В	the page numbers are missing	
	С	the surnames of the researchers should be listed in alphabetical order	
	D	the title should give the aim of the investigation	
	Υοι	ur answer	[1]
3	Wh	ich two groups were compared in Chaney et al.'s (2004) study into operant conditioning?	
	Α	children being praised for using their inhaler and children being ignored when using the inhaler	eir
	В	children using a standard inhaler and children using a modified inhaler	
	С	children using an inhaler and children using no inhaler	
	D	children with asthma and children without asthma	
	You	ur answer	[1]

4		ok at the following data set from a condition where participants were timed (in secon mpleting a task in a crisis situation.	ds)
	{36	i 45 51 67 54 19 50 45 27 76 54 45}	
	Wh	nat is the range of this data set?	
	Α	45	
	В	47.5	
	С	58	
	D	76	
	You	ur answer	[1]
5	Rea	ad the following hypothesis.	
		"Women who earn above average salaries will score significantly higher on a confidence to momen who earn below average salaries."	est
	Wh	nat is the independent variable in this hypothesis?	
	Α	earnings above or below average salaries	
	В	high or low average salary	
	С	high or low score on a confidence test	
	D	women or men	
	You	ur answer	[1]
6		nich group of people were included as participants for Maguire's (2000) study into the hippocar axi-drivers?	mpi
	A	females	
	В	left-handed people	
	С	people above 32 years of age	
	D	people with health problems	
	Υοι	ur answer	[1]

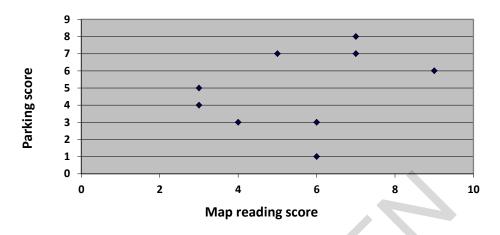
7	Wh	at is meant by the term 'socially desirable responses' in psychological research?	
	A	responses which are personal even if they are subjective	
	В	responses which are reliable even if they are invalid	
	С	responses which reflect the participants' wishes even if they are unacceptable to others	
	D	responses which the participants think they ought to give even if they are not true	
	You	ur answer	[1]
8	Wh	ich is an example of qualitative data?	
	Α	the diary entries of six patients suffering from schizophrenia	
	В	the length of time each participant spent reading a list of words	
	С	the modal colour chosen by extroverts	
	D	the percentage of respondents who agreed with capital punishment	
	You	ur answer	[1]
9		nat is the probability of a significant result occurring by chance where the significance level 0.025?	l is
	A	2.5% or less	
	В	25% or less	
	С	at least 97.5%	
	D	less than 2.5%	
	You	ur answer	[1]
10	Wh	ich inferential test should a researcher use to decide whether a correlation is significant?	
	Α	Binomial Sign test	
	В	Mann–Whitney U test	
	С	Spearman's Rho test	
	D	Wilcoxon Signed Ranks test	
	You	ur answer	[1]

11	Wh	ich one of the following is a feature of <b>all</b> experiments?	
	Α	direct manipulation of the independent variable	
	В	measurement of a dependent variable	
	С	random allocation of participants to conditions	
	D	use of controlled environment	
	Υοι	ur answer	[1]
12		w was one of the dependent variables measured in Grant et al.'s (1998) study into contempendent memory?	xt-
	Α	the amount of time taken to recall ten key details from a written passage	
	В	the number of details recalled from a commentary played through headphones	
	С	the number of written words recognised from a commentary played through headphones	
	D	the score from multiple-choice questions based on a written passage	
	Υοι	ur answer	[1]

[1]

### 13 Look at the following scatter diagram:

# A graph to show the relationship between participants' map reading score and parking score.



Which is the best estimate of the correlation coefficient for the above data?

- **A** 0.7
- **B** 0.4
- **C** 0.3
- **D** 0.8

Your answer		

14 What is a weakness of using a mode as a measure of central tendency?

- A it can generate a number not in the data set
- B it is easily affected by outliers
- C it is not suitable for nominal data
- **D** it relies on a score occurring more than once

Your answer	
	[1]

15	vvn	lich is a requirement of a parametric test?	
	Α	data is at least ordinal level	
	В	mean scores are significantly different	
	С	sample is drawn from a skewed population	
	D	standard deviations are not significantly different	
	Υοι	ur answer	[1]
16	In I	Bandura's (1961) Bobo doll study, the participants were pre-tested to assess their aggressels.	sion
	Wh	nat was the main purpose of his procedure?	
	A	to allow for a matched pairs design	
	В	to exclude children who were especially aggressive	
	С	to help to decide on the sex of the role model for each participant	
	D	to measure the change in aggression before and after the experiment	
	You	ur answer	[1]
17	Wh	nich feature of science refers to the importance of being able to refute a psychologist's claim?	
	Α	deduction	
	В	face validity	
	С	falsification	
	D	verification	
	Υοι	ur answer	[1]

18	Wh	ich is an example of interval level data?	
	A	the mass, in grams, of the brain of an individual with schizophrenia	
	В	the number of nightmares experienced by an individual with schizophrenia	
	С	the number of times an individual with schizophrenia has been admitted to hospital	
D	the	rating of the severity of the delusions experienced by an individual with schizophrenia	
	You	ur answer	[1]
19	Wh	at was Milgram (1963) unable to control in his experiment into obedience?	
	A	how Mr Wallace interacted with the participant	
	В	the comments used as prods	
	С	the confederate acting as the experimenter	
	D	the increments in voltage	
	You	ur answer	[1]
20	Wh	at is meant by induction in psychological research?	
	Α	where a theory is tested through observations	
	В	where observations contradict a theory	
	С	where observations generate a definitive theory	
	D	where observations generate a likely theory	
	You	ur answer	[1]

### **SECTION B: Research design and response**

Answer all the questions in Section B.

A psychologist used an observation to investigate the effect of environment on individuals' need for personal space. They decided to carry out a covert observation in three settings: a nightclub, a college library and the changing room in a leisure centre. Members of the public using the facilities made up the sample. The psychologist observed key behaviours, such as reduced eye contact, defensive body posture and movement away from people.

21	Outline <b>one</b> strength of using an observation compared to self-report.
22	Identify <b>three</b> ethical issues that would need to be considered when carrying out this observation.
	[3]
23	The psychologist used an opportunity sample for their research.
	(a) Explain <b>one</b> strength and <b>one</b> weakness of using an opportunity sample for this study. [6]

•	
•	
•	
(b)	Name and outline <b>one</b> other sampling technique for selecting participants.
(-)	
	[2]
	Describe <b>one</b> strength and <b>one</b> weakness of the sampling technique you have chosen in stion 23(b). [4]
que	[+]

	have been asked to carry out a further observational study to investigate the differences in use of personal ce between rural and urban environments. This will be part of a quasi experiment using one village and one
24	Write an alternative hypothesis for your investigation.
	[3]
25*	Explain how you would carry out an observation to investigate the differences in use of personal space between rural and urban environments. Justify your decisions as part of your explanation.
	You must refer to:
	<ul> <li>structured or unstructured observations</li> <li>participant or non-participant observations</li> <li>time or event sampling</li> <li>collection of data.</li> </ul>
	You should use your own experience of carrying out an observation to inform your response.

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Turn over for the next question

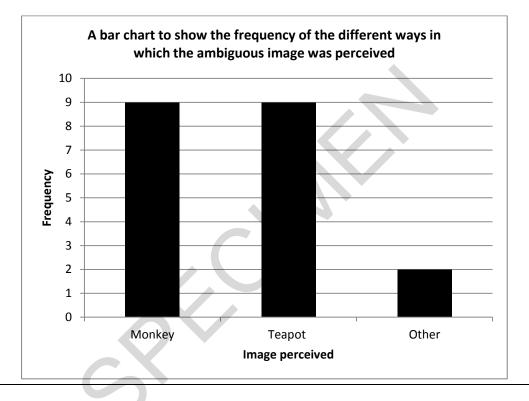


### **SECTION C: Data analysis and interpretation**

Answer all of the questions in Section C.

A psychologist tested the effects of expectations on people's perceptions by carrying out the following experiment. The test item was an ambiguous image – an image that had been purposefully drawn to be perceived in one of two ways – either as a monkey or as a teapot. Participants had to say what they saw after they had viewed the image for one second.

Before carrying out the experiment, the psychologist had checked that the ambiguous image could be perceived in one of two ways. His findings, from this check, are presented in the bar chart below:



<b>26 (a)</b> Identify <b>two</b> findings from the bar chart.		
		[2]

(b) Explain why a bar chart is appropriate for presenting this data.
[2]
(c) Calculate the percentage number of times that the image was identified as neither a monkey nor a teapot. Show your workings.
[2]
Fifty participants were recruited and then randomly allocated into two groups. In one condition, five drawings of
other animals were presented, one after the other, before the ambiguous image. Participants had to name each one of these. In the second condition, the set up was the same but five images of kitchen items were used.
one of these. In the second condition, the set up was the same but live images of kitchen items were used.
27 (a) Name and briefly describe the experimental design used in this study.
[2]
(b) Explain how the psychologist would have randomly allocated participants to each group [2]

4	$\sim$
1	n
	v

16			
(c) Discuss why this exper	imental design was ann	ronriate for this study	
(c) Disouss willy this exper	inicital design was app	ropriate for this study.	
[5]			
The findings from the study are presented below:			
A table to show the number of participants who perceived the ambiguous image as a monkey or as a teapot			
from both conditions: image presented with animals and image presented with kitchen items			
	Parcaived as mankay	Parcaived as tagest	
Presented with animals	Perceived as monkey 15	Perceived as teapot 10	
riesenteu with dillillais	12	10	
Presented with kitchen items	5	12	
Tesented with Ritchell itellis		14	

28 (a) Identify and simplify the ratio of the number of participants who perceived a monkey in the first condition and the number who perceived a monkey in the second condition. [2]

<b>(b)</b> Identify and simplify the ratio of the number of participants who perceived a teapot in the first condition and the number who perceived a teapot in the second condition.	
[2	2]
The psychologist analysed the data using the Chi Squared test. Give <b>two</b> reasons for this choice of test with reference to the study.	of
	••
	••
	• •
	• •
	• •
[4	11

29

30	Explain how the ps	sychologist would de	etermine the approp	oriate degrees of fre	eedom (df) for this test
					[2]
					-
The	Chi Squared gave a	an observed (calcula	ated) value of 3.80		
	Levels of significan	ce for a one–tailed t	est		
	Significance	0.05	0.025	0.01	]
	Level Critical Value	2.71	3.84	5.41	
			In.		
	Using the above cri or not.	tical values, explain	whether the psych	ologist has found a	significant difference
	or not.				

.....

Outline what is meant by each of the following features of science and state how they apply to

32

this experiment into perception.	
(a) Cause and effect	
	[3]
	[0]
(b) Objectivity	
	[3]

## **END OF QUESTION PAPER**



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