**Section B- Research Methods**

1. You are the researcher:

Construct a field experiment that looks at whether people are more willing to help females or males when asked to change a 20p piece for two 10p pieces.

Briefly outline your procedure an explain the following

* Why would this be a field experiment rather than a lab or natural/quasi experiment?
* What would be your IV and DV?
* What type of sample would you be using?
* Compose a suitable hypothesis for your study.

**10 marks**

1. In 1972, Koluchova conducted a case study into twin boys who had been severely abused by their stepmother.
* Why was the case study method the only viable way of studying these boys?
* What advantages and weaknesses of the case study method may apply in this particular study?

**5 marks**

1. What is a pilot study and why might it be used?

**3 marks**

1. Researchers decided to study the behaviour of a young girl who experienced disruption to attachment when she had to go into hospital for a few days. Naturalistic observation of the girl before and after the separation was conducted, with each period of observation lasting 2 hours.
* Suggest 2 behavioural categories the researchers could use to record the girls behaviour
* How might the researchers record the girl’s behaviour?
* Explain why a pilot study might be carried out before the main observation
* Explain why researchers would need to establish inter-rater reliability
* Explain how inter-rater reliability could be established

**10 marks**

1. Use the data in the table below to create a results table showing male and female total scores, mean scores and ranges **(6 marks).**

|  |  |
| --- | --- |
| Male participants | Concentration test score (out of 10) |
| 1 | 5 |
| 2 | 6.2 |
| 3 | 7.3 |
| 4 | 8.1 |
| 5 | 6.3 |
| 6 | 4 |
| 7 | 7.1 |

|  |  |
| --- | --- |
| Female participants | Concentration test score (out of 10) |
| 1 | 5 |
| 2 | 6.2 |
| 3 | 7.3 |
| 4 | 8.1 |
| 5 | 6.3 |
| 6 | 4 |

1. What graph would be appropriate to use with this data? Explain your answer **(1+2 marks)**
2. Outline one strength and one weakness of standard deviation **( 2+2 marks)**
3. Outline one difference between primary and secondary data? **(2 marks)**

**Percentages**

**All the following questions must include your workings for full marks.**

**You may use a calculator.**

1. Wayne bought an engagement ring for Tracey.

The total cost of the ring was £430 **plus** VAT at 17.5%

1. Work out the cost of the ring *(2 marks)*

Wayne invited 96 people to an engagement party.

Only 60 of the people invited came to the party.

1. Express 60 as a percentage of 96 *(2 marks)*
2. A doctor has 12000 patients.

4560 of these patients are male.

What percentage of these patients are **female**? *(3 marks)*

1. Martin had to buy some cleaning materials.

The cost of the cleaning materials was £64.00 **plus** VAT at 17.5%

Work out the total cost of the cleaning materials. *(2 marks)*

1. There are 800 students at Prestfield School.

45% of these 800 students are girls.

1. Work out 45% of 800 (*2 marks)*

There are 176 students in Year 10.

1. Write 176 out of 800 as a percentage *(2 marks)*
2. Alistar sells books.

He sells each book for £7.60 plus VAT at 17.5%.

He sells 1650 books.

Work out how much money Alistair receives *(4 marks)*

1. A hotel has 56 guests.

35 of the guests are male.

1. Work out 35 out of 56 as a percentage (*2 marks)*

40% of the 35 male guest wears glasses.

1. Write the number of male guests who wear glasses as a fraction of the 56 guests. Give your answer in its simplest form. (*4 marks)*
2. The cost of a compact disc holder is 25p.

John has £15 to spend.

1. What is the greatest number of compact disc holders that John can buy for £15? *(3 marks)*

A compact disc player costs £50 plus VAT at 17.5%.

1. Calculate the total cost of the compact disc player *(3 marks)*