AQA Paper 2 Exam Analysis



RESEARCH METHODS

<u>2025</u>

Why non-directional hypothesis is appropriate – scenario (2) Write a hypothesis – scenario (3) Sampling method - scenario (1) Evaluate sampling method - scenario (4) Median and range values - scenario (4) Axes on bar chart (2) Choose a stats test and why – scenario (7) What is meant by p<0.01 - scenario (3) One change after using independent groups design (2) One or more implications for the economy - scenario (4) One or more features of a science – scenario (4) Design a study; experiment or self-report – scenario (12)

<u>2024</u>

Primary and secondary data – scenario (2) Content analysis - scenario (4) Reliability in content analysis – scenario (4) Improvement to interviews – scenario (3) Qualitative data question – scenario (2) Limitation of qualitative data (1) Informed consent – scenario (4) Type of experiment (quasi) – scenario (3) Pilot study improvement – scenario (4) Stratified sampling – scenario (4) Distribution in the data – scenario (4) Mean values in data – scenario (2) Reasons for unrelated t-test – scenario (6) Critical value and significance – scenario (2) Type 1 error – scenario (3)

<u>2023</u>

Hypotheses (1) Repeated measures design & independent groups design (2) Counterbalancing – scenario (3) Validity of self-report scales – scenario (4) Strength & weakness of quantitative data - scenario (4) Median and range values - scenario (4) Weakness of using the range - scenario (4) Significance of Wilcoxon value at 0.01 - scenario (2) Type 2 errors - scenario (2) Reducing type 2 errors - scenario (1) Strength of sampling methods (random/ stratified) - scenario (4) Co-variables in correlation - scenario (4) Statistical test for correlation & reasons - scenario (5) Peer review (2) Ethical issues in research (6)

<u>2022</u>

Controlled observation – scenario (4) Limitation of controlled observations (1) Behavioural categories – scenario (4) Time sampling – scenario (4) Strength and limitation of using time sampling – scenario (4) Inter-observer reliability - scenario (4) Statistical test – choice/ reasons (7) Quantitative data & validity – scenario (2) Implications for the economy (3) Features of an abstract in scientific report (3) Design an experiment – scenario (12)

<u>2021</u>

Experimental method – scenario (1) Directional hypothesis – scenario (3) Identify the sampling method (1) Strength and weakness of the sampling method – scenario (4) Strength of collecting quantitative data – scenario (2) One way deal with deception – scenario (2) Why additional questions are included (distractors) (2) Limitation of rating scale (2) Control of extraneous variables (4) Why correlation over an experimental method (2) Random sampling – scenario (3) Spearman's rho test – reasons (4) Identify critical value from table and why (4) Hypothesis to accept and why (2) Why 5% probability level was used (2) Type two errors (2) Features of science with examples (8)

<u>2020</u>

Sections of scientific report (1) Correlation coefficients (1) Type of graph/ scattergram - scenario (3) Making correlational conclusions – scenario (2) Meta analysis definition (2) Population and sampling example – scenario (2) Directional hypothesis – scenario (1) Appropriate hypothesis (3) Data in the table – distribution of scores (4) Mean and standard deviation – scenario (4) Statistical test – choice/ reasons (7) Matched pairs designs (4) Matched pairs variables (2) Design an observation – scenario (12)

<u>2019</u>

Definition of reliability (1) Role of peer review in the scientific process (1) Why it is important for scientific reports to include a referencing section (1) IV/ DV in scenario (1) Directional or non-directional hypothesis be more suitable in scenario (2) Write hypothesis in this scenario (3) Type of sampling method (3) Matched-pairs design in scenario (4) Matched-pairs design rather than a repeated-measures design (2) Calculate the value of S from sign test in scenario (2) Whether or not there was a significant difference (2) Concurrent validity (2) Improve the internal validity in scenario (4) Suggest an appropriate statistical test (4) Design an independent groups experiment (12)

<u>2018</u>

Percentages – scenario (1)

Pilot study – scenario (3)

Qualitative data in interviews (2)

Investigator effects – scenario (3)

Content analysis – scenario (4)

Reliability of the content analysis (4)

Calculate from percentages (2)

Draw/label graph (4)

Consent form (6)

Directional hypothesis (one-tailed) (3)

Repeated measures design - scenario (2)

Counterbalancing – scenario (2)

Random allocation to groups (3)

Identify mean and standard deviation - scenario (4)

Significant at p<0.05 – scenario (2)

Improve validity – scenario (3)

<u>2017</u>

Type of experiment – scenario (1)

Operationalised dependent variable (2)

Why a histogram would not be an appropriate way of displaying the means (2)

Name a more appropriate graph to display the means and suggest appropriate X (horizontal) and Y (vertical) axis labels for your graph choice. (3)

Explain mean and standard deviation values (4)

Calculate the percentage (4)

Interpret related t-test/ significance (5)

Type II error and explain why psychologists normally use the 5% level of significance (3) One extraneous variable and how it could be controlled (3) Describe the process and purposes of peer review (6) Explain why it is more appropriate to use an observation than a questionnaire (3) Design an observational study to investigate how people spend their time at the gym (12)

Specimen Practice Papers

Identify the dependent variable - scenario (2)

Write a suitable hypothesis (3)

One extraneous variable and how it could be controlled (3)

One advantage of using a stratified sample (2)

Show calculations for stratified sample (3)

How to randomly allocate the stratified sample (4)

Conclusions by referring to means and standard deviations (6)

Using standard deviation rather than the range (3)

Name an appropriate statistical test and why (4)

What is meant by the results were significant at p<0.05 (2)

One method to check the validity (2)

One reason for peer review process (2)

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 (12)

Directional hypothesis (2)

Write a suitable hypothesis (3)

Identify a suitable graphical display (2)

Using the graph comment on the relationship (3)

One problem of using a single trained observer (6)

Why Spearman's rho test is suitable (3)

Conclusions from the stats test results/ significance (4)

Distinguish between a Type I error and a Type II error (4)

Explain mean and standard deviation (4)

Calculate percentages (4)

Comment on results (2)

One reason why it is important for research to be replicated (2)

Design a study to investigate possible gender differences in card sorting behaviours (9)

