

Actuary interview questions

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What to expect

Actuarial interviews mix technical questions that test how you think about models and risk with behavioural questions that check how you handle judgement calls and communicate with people outside the profession. Expect the panel to probe your exam progress and practical experience alongside your reasoning.

- **Technical and quantitative:** Questions that test how you'd approach building, checking or interpreting an actuarial model.
- **Scenario and judgement:** Situations involving pricing, reserving or regulatory pressure where there's no single textbook answer.
- **Regulatory and compliance:** Questions on statutory reporting obligations and how you stay current with standards such as those set by APRA.
- **Behavioural:** Past-experience questions on problem solving, stakeholder handling and dealing with model results that don't match expectations.
- **Client-facing and communication:** Questions testing whether you can explain actuarial concepts to non-technical executives or clients.

Interviews typically open with a discussion of your exam progress and background, move into a technical case study or modelling walk-through, then shift to behavioural questions, and close with time for your own questions about the team and its work.

1. Walk me through how you would build a model to estimate longevity risk for a life insurance portfolio.

Why they ask

This checks whether you understand the practical steps of actuarial model-building, not just the theory.

How to structure your answer

Answer as a step-by-step walk-through: data inputs, assumptions, model choice, validation, and how the output would be used downstream.

Example answer

"I'd start by pulling mortality experience data for the relevant portfolio and comparing it against a standard mortality table to see where the population differs. From there I'd select or adjust a base table, build the projection in R, and stress-test the assumptions against recent claims trends before locking anything in. Once the model runs, I'd validate the outputs against actual experience over the last few years and document any material deviations before it feeds into pricing or reserving."

2. Tell me about a time you had to validate a model that produced results you didn't expect.

Why they ask

Actuaries regularly have to decide whether an unexpected result points to a genuine risk finding or a modelling error, and this tests that judgement.

How to structure your answer

Use STAR: situation, task, action, result.

Example answer

"While reviewing claims projections, I noticed the model was showing a sharp increase in expected claims that didn't match what the underwriting team was seeing on the ground. I went back through

the data feed and found a duplication issue in how policy exposures were being counted. After correcting it and rerunning the model, the projection came back in line with expectations, and I added a data reconciliation check to the process so the same issue wouldn't slip through again."

3. A regulator raises a query about your statutory valuation just before the reporting deadline. What do you do?

Why they ask

This tests judgement under pressure and understanding of regulatory obligations, both central to the statutory side of the role.

How to structure your answer

Answer as a judgement-under-pressure response: how you'd assess the query, prioritise, and communicate, rather than a single fixed process.

Example answer

"I'd treat the query as a priority over other deadline pressure, since a statutory sign-off has to be defensible. I'd go back to the working papers to understand exactly what's being questioned, involve my manager or the appointed actuary early, and prepare a clear written response with supporting calculations. If the deadline can't be met without compromising the quality of the response, I'd rather flag that early to the regulator than submit something rushed."

4. How do you keep up with changes to APRA prudential standards or reporting requirements like IFRS 17?

Why they ask

Actuarial standards and reporting requirements change, and the role expects ongoing awareness rather than a one-off qualification.

How to structure your answer

Outline your approach to staying current, with a concrete example.

Example answer

"I follow updates from the Actuaries Institute and APRA directly, and I make time to read technical papers and attend relevant sessions when standards change. When IFRS 17 requirements were being finalised, I worked through the practical implications for our reporting process ahead of implementation, rather than waiting until it became urgent."

5. How would you explain reserve strengthening to a non-technical executive who's asking why profit is being reduced this quarter?

Why they ask

Actuaries have to translate technical outputs into decisions the business can act on, and this tests that communication skill directly.

How to structure your answer

Explain your communication approach, then give a worked example of the explanation itself.

Example answer

"I'd avoid jargon and start with the business impact: our claims experience is running higher than the assumptions we set reserves on, so we're increasing reserves now to make sure we can cover future claims. I'd show the trend in the underlying data rather than just the model output, since that's usually what makes the case land with a non-technical audience."

6. Which tools do you rely on for modelling, and how do you decide between them, R, Python, Prophet or Excel?

Why they ask

The role uses a specific toolset, and this checks practical familiarity rather than just naming tools on a resume.

How to structure your answer

Compare the tools by use case rather than listing them generically.

Example answer

"I use R for statistical modelling and quick exploratory analysis because of the actuarial packages available, and Python when I need something that integrates more easily into a wider data pipeline. Prophet comes in for the specific projection and valuation software we run our official numbers through, and Excel still gets used for quick checks and communicating results to people who aren't going to open an R script."