

Biomedical Technician interview questions

careertips.com.au: common questions and what they're really testing

What to expect

Biomedical Technician interviews blend technical assessment with safety and communication checks. Employers want to see that you can fault-find methodically, work to standards, and explain equipment issues to clinical staff without jargon.

- **Technical fault-finding:** Questions that ask you to describe how you would diagnose a fault in a specific device or circuit.
- **Safety and compliance:** Questions about testing to AS/NZS 3551, electrical safety, and documentation.
- **Process and procedure:** Questions about your approach to preventive maintenance, calibration, and record keeping.
- **Behavioural:** Questions that ask for examples of past work, teamwork, or handling pressure.
- **Scenario and judgement:** Questions that put you in a realistic ward situation, such as a device failing during a procedure.
- **Client-facing communication:** Questions about how you explain technical issues to nurses, doctors, or equipment suppliers.

Typically a first interview with a clinical engineering manager and sometimes a senior technician. It may include a practical test where you are asked to troubleshoot a device or complete a safety test. Second interviews are less common but may involve meeting the wider team or a hospital tour.

1. A patient monitor is showing intermittent loss of signal on one lead. How would you approach diagnosing and repairing it?

Why they ask

This tests your systematic fault-finding and your ability to work from simple checks to more complex signal tracing.

How to structure your answer

A logical walk-through: start with the simplest checks, then move to signal tracing, component testing, and repair verification.

Example answer

"I would first check the lead and electrode connections, then swap the lead to see if the fault follows. If it does, I would test the lead for continuity and replace it if needed. If the fault stays with the monitor, I would open the unit and inspect the input connector for damage or contamination, then use an oscilloscope to trace the signal from the patient input through the isolation circuit. Once I found the faulty component, I would replace it, then run a full performance test and safety check to confirm the monitor meets specifications before returning it to the ward."

2. How do you ensure your work meets AS/NZS 3551 and manufacturer requirements?

Why they ask

This probes your understanding of Australian medical device safety standards and your record-keeping discipline.

How to structure your answer

A structured explanation: describe your process for testing, documentation, and staying current with standards.

Example answer

"I follow the test sequence in AS/NZS 3551, starting with visual inspection and then earth continuity, insulation resistance, and leakage current tests. I use a calibrated electrical safety analyser and record every result in the clinical engineering database. I keep manufacturer service manuals on hand and check for updates to test procedures. If a device fails, I tag it out of service and follow the repair and retest flow. I also attend training when new standards or device models come out, so I know what has changed."

3. Walk me through your preventive maintenance routine for infusion pumps.

Why they ask

This checks your practical process for a high-volume device and how you handle issues found during routine work.

How to structure your answer

A step-by-step breakdown: describe the schedule, the tests you perform, and how you handle issues found.

Example answer

"I would start by checking the maintenance schedule in the CMMS to see which pumps are due. For each pump, I would clean and inspect it for physical damage, then test the flow rate accuracy, occlusion alarm, and battery performance. I would also run an electrical safety test. If any parameter is out of tolerance, I would either adjust it or escalate for repair. After passing, I would update the asset record with the test results and return the pump to the ward. I also keep an eye on repeat failures and would flag a pump for replacement if it keeps coming back with the same fault."

4. Tell me about a time you had to explain a technical issue to a clinical staff member who was frustrated.

Why they ask

This assesses your communication skills and empathy when working with clinical teams under pressure.

How to structure your answer

STAR: Situation, Task, Action, Result.

Example answer

"A nurse called me because a defibrillator was showing an error and she needed it for a resuscitation trolley. She was stressed because the trolley had to be ready for an emergency. I listened, explained that I would check the device immediately, and gave her a loan unit within ten minutes so the trolley was covered. I then found the fault was a faulty battery connection. I repaired it, ran a full test, and returned it to the ward later that shift. The nurse appreciated the quick swap and the clear update. I also followed up with the ward manager to see if other trolleys needed checking."

5. You are called to the ICU because a ventilator is alarming during a patient's use. What do you do?

Why they ask

This tests your judgement under pressure and your ability to prioritise patient safety while troubleshooting.

How to structure your answer

A judgement under pressure structure: prioritise patient safety, follow clinical escalation, then troubleshoot without disrupting care.

Example answer

"My first priority is patient safety, so I would check with the bedside nurse whether the patient is stable and whether they have a backup ventilator ready. If the clinical team needs to swap the ventilator, I

would help make that happen smoothly. Then I would take the faulty ventilator out of service and troubleshoot it in the workshop. I would check the alarm log, run the manufacturer's diagnostics, and look for common causes like a blocked filter or sensor error. Once repaired, I would run a full performance and safety test before returning it to the pool. I would also document the fault and check if any other ventilators in the fleet need the same fix."

6. How would you handle a recall of a device model that your hospital uses in several wards?

Why they ask

This evaluates your project coordination, supplier communication, and ability to manage a recall without disrupting clinical services.

How to structure your answer

A project management structure: identify affected assets, plan the recall, communicate, and verify completion.

Example answer

"I would start by pulling the asset list from the CMMS to find every device with that model and serial number range. Then I would contact the supplier to get the recall instructions and any replacement parts. I would prioritise high-risk areas like ICU and ED, and arrange for loan units if needed so patient care is not affected. I would work with ward managers to schedule the upgrades or replacements, and I would keep a log of every device as it is completed. Once all affected devices are done, I would update the records and send a summary to the supplier and my manager."