Optoelectronic Technician Interview Questions

1. Share an example when you effectively adjusted or maintained equipment, such as lasers, laser systems, microscopes, oscilloscopes, pulse generators, power meters, beam analyzers, or energy measurement devices.

2. What kind of experience do you have assembling devices or equipment to be used in green technology applications, including solar energy, high efficiency solid state lighting, energy management, smart buildings, or green processes?

3. How do you effectively monitor mechanical factors, such as turbine load or strain information?

4. Name a time when you fabricated sensors to be used to control wind turbines.

5. What factors do you consider when developing solar power sources for lasers used in fiber optics?

6. Walk me through how you would build photonics tools to be applied to electrical grids to detect hot spots, such as failing insulators or conductors.

7. Describe methods you have found effective to assemble components of energy-efficient optical communications systems involving photonic switches, optical backplanes, or optoelectronic interfaces.

8. Describe an experience when you recommended design or material changes to reduce costs or processing times. Share an example.

9. What is the most challenging part of testing or performing failure analysis for optomechanical or optoelectrical products, according to test plans?

10. How often do you assist scientists or engineers in the conduct of photonic experiments? Is it productive?

11. Share an effective approach to perform diagnostic analyses of processing steps, using analytical or metrological tools, such as microscopy, profilometry, or ellipsometry devices.

12. Name a time when you optimized process parameters by making prototype and production devices.

13. Tell me about the last time when you mixed, poured, or used processing chemicals or gases according to safety standards or established operating procedures.

14. What is the key to success with assisting engineers in the development of new products, fixtures, tools, or processes? Share an example.

15. What have you found to be the best way to set up or operate prototype or test apparatus, such as control consoles, collimators, recording equipment, or cables?

16. Walk me through how you would set up or operate assembly or processing equipment, such as lasers, cameras, die bonders, wire bonders, dispensers, reflow ovens, soldering irons, die shears, wire pull testers, temperature or humidity chambers, or optical spectrum analyzers.

17. Share an example when you repaired or calibrated products, such as surgical lasers.

18. What kind of experience do you have fabricating devices, such as optoelectronic or semiconductor devices?

19. Share an example when you successfully built prototype optomechanical devices for use in equipment such as aerial cameras, gun sights, or telescopes.

20. Describe methods you have found effective to assemble fiber optical, optoelectronic, or free-space optics components, subcomponents, assemblies, or subassemblies.