# Bioprocess Development Engineer Interview Questions

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| 1. Share how you devise scalable recovery, purification, or fermentation processes for producing proteins or other biological substances for human or animal therapeutic use, food production or processing, biofuels, or effluent treatment. |
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| 2. How often do you read current scientific or trade literature to stay abreast of scientific, industrial, or technological advances? |
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| 3. Name a time when you designed or conducted studies to determine optimal conditions for cell growth, protein production, or protein or virus expression or recovery, using chromatography, separation, or filtration equipment, such as centrifuges or bioreactors. |
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| 4. What is the most challenging part of confering with research and biomanufacturing personnel to ensure the compatibility of design and production? |
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| 5. Share an experience in which you successfully shared a difficult piece of information. (Make sure that the candidate has open lines of communication.) |
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| 6. Tell me how you organize, plan, and prioritize your work. |
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| 7. Give me an example of when you thought outside of the box. How did it help your employer? |
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| 8. Tell me about an experience in which you analyzed information and evaluated results to choose the best solution to a problem. |
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| 9. Would you consider analyzing data or information a strength? How so? |
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| 10. Share an effective approach to working with a large amount of information/data. How has your approach affected your company? |
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| 11. Share an example of a time you had to gather information from multiple sources. How did you determine which information was relevant? |
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| 12. Provide a time when you were able to identify a complex problem, evaluate the options, and implement a solution. How did the solution benefit your employer? |

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| 13. Name a time when you identified strengths and weaknesses of alternative solutions to problems. What was the impact? |
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| 14. Share a time when you successfully used scientific rules or methods to solve a problem at work. |
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| 15. Provide an example of a time when you were able to demonstrate excellent listening skills. What was the situation and outcome? |
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| 16. How would you rate your writing skills?  (Ask for an example that demonstrates great writing skills.) |
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| 17. Please share an experience in which you presented to a group. What was the situation and how did it go? |
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| 18. Explain methods you use to develop methodologies for transferring procedures or biological processes from laboratories to commercial-scale manufacturing production. |
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| 19. Walk me through how you design or direct bench or pilot production experiments to determine the scale of production methods that optimize product yield and minimize production costs. |
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| 20. What have you found to be the best way to prepare technical reports, data summary documents, or research articles for scientific publication, regulatory submissions, or patent applications? |
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| 21. Share an experience in which your attention to detail and thoroughness had an impact on your last company. |
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| 22. What are some long-range objectives that you developed in your last job? What did you do to achieve them? |
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| 23. Provide an example when your ethics were tested. |
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| 24. Share an effective way to communicate with bioregulatory authorities regarding licensing or compliance responsibilities. |
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| 25. What kind of experience do you have maintaining databases of experiment characteristics or results? |

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| 26. Share an example where you designed or conducted follow-up experimentation, based on generated data, to meet established process objectives. |
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| 27. Tell me how you advise manufacturing staff regarding problems with fermentation, filtration, or other bioproduction processes. |
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| 28. Why is it important to consult with chemists or biologists to develop or evaluate novel technologies? What have you found helpful? |
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| 29. Provide an example of a time when you successfully organized a diverse group of people to accomplish a task. |
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| 30. Share an example of when you went above and beyond the "call of duty". (Look for answers that show the candidate is dependable.) |
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| 31. Share an example of when you established and accomplished a goal that was personally challenging. What helped you succeed? |
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| 32. Tell me how you recommend biochemical process formulas, instrumentation, or equipment specifications, based on results of bench or pilot experimentation. |
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| 33. What is the secret to collaborate with manufacturing or quality assurance staff to prepare product specification or safety sheets, standard operating procedures, user manuals, or qualification and validation reports? |
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| 34. Tell me about the last time when you lead studies to examine or recommend changes in process sequences or operation protocols. |
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| 35. Share a process you use to prepare project plans for biochemical equipment or facility improvements, including time lines, budgetary estimates, or capital spending requests. |
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| 36. What kind of experience do you have designing processes to manufacture synthetic molecules for applications such as pharmaceuticals or pesticides? |

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| 37. Provide an example of when you were persistent in the face of obstacles. |
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| 38. Share an experience you had in dealing with a difficult person and how you handled the situation. |
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| 39. Provide a time when you worked in a rapidly evolving workplace. How did you deal with the change? (Make sure the candidate is flexible.) |
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| 40. How important is it to review existing biomanufacturing processes to ensure compliance with environmental regulations? |
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| 41. Name a time when you collaborate in the development or delivery of biochemical manufacturing training materials. |
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| 42. Walk me through how you create simulations or models to predict the impact of environmental factors, such as pollutants, climate change, or environmental remediation efforts. |
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| 43. What kind of experience do you have preparing piping or instrumentation diagrams or other schematics for proposed process improvements, using computer-aided design software? |
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| 44. How do you develop processes or products, such as natural recovery monitoring, in-situ capping or treatment, or sediment removal, to treat contamination of subaqueous sediment? Share an example. |
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| 45. Have you ever developed statistical models or simulations of biochemical production, using statistical or modeling software? If so, were you successful? |
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| 46. Share a practical process to develop alternative processes to produce crude oil, such as extraction from diatoms or thermochemical conversion of manure or other wastes. |
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| 47. Share an experience in which you successfully coordinated with others. How about a coordination effort that was not as successful? |
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| 48. Tell me about a time when you developed your own way of doing things or were self-motivated to finish an important task. |

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| 49. Provide an experience that demonstrates your ability to manage time effectively. What were the challenges and results? |
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| 50. Share an experience in which you used new training skills, ideas, or a method to adapt to a new situation or improve an ongoing one. (Look for the candidate's ability to learn.) |
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| 51. Name a time when your patience was tested. How did you keep your emotions in check? |
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| 52. Share an experience in which you conducted a test of a product, service, or process and successfully improved the quality or performance. |
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| 53. Describe a time when you successfully persuaded another person to change his/her way of thinking or behavior. |
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