Affinity Chromatography Methods for Monoclonal Antibody Purification in Downstream Processing. University level scientific literary review. The Subject is biopharmaceutical science, protein purification topic. Please see attached materials relating to the area pf this subject and scientific essay/ review. Please include a case study discussion. Must be original piece, this will be screened on turnitin plagiarism platform. The essay must achieve the following: Critically evaluate the current state of the art (ideally over the last 5 years). Are there any significant gaps in our knowledge, and how these are being addressed? Explains clearly and accurately the basis for the chromatography technology as used in manufacturing scale protein purification or downstream processing (DSP). What is it best designed to achieve and how does it fit into the overall DSP process? Provide clear and well-illustrated (sample data from published studies) applications or case studies of the technology in action or development for DSP drawn where possible from recent (last 5 years) relevant published peer-review articles. This is a critical requirement. Do not overlook it! Discuss the technology in terms of both its usefulness and its limitations. Compare different studies and highlight where it has proven particularly useful and any innovations that might have contributed to this. This may also include suggestions on alternate technologies that can overcome any identified limitations and/or improve the overall usefulness of the technology. Indicate clearly and accurately the published sources of information used to develop the essay content (citations within the text and reference lists). Insofar as possible, these are to be drawn from recent relevant published peer-reviewed articles, ideally from the last 5 years. The essay submission must demonstrate a personal deep understanding of the subject material and its applications. conclusions on the merits or otherwise of the chosen technology must be drawn. This must be an original piece. Plagiarism is considered a very serious offence and will attract severe penalties up to and including outright failure in the essay assignment. Harvard style referencing required.