a. The use-case described in option a, where a model allocates which mail folder an email should be sent to (work, friends, promotions, important), falls under the category of text classification or email filtering. The NLP application would involve training a model to classify incoming emails based on their content and assign them to the appropriate folder.

b. The use-case described in option b, where a model helps decide what grade to award to an essay question, falls under the category of automated essay scoring. This involves developing a model that can assess the quality and content of an essay and assign it a grade or score. It typically uses techniques such as natural language understanding, language modeling, and machine learning to evaluate the essay.

c. The use-case described in option c, where a model provides assistive technology for doctors to provide their diagnosis by using patient answers, falls under the category of question answering, or medical diagnosis/clinical decision support. The NLP application would involve developing a model that can understand and analyse patient responses to specific questions and provide probable diagnoses or recommendations based on that information. The model would assist doctors in making informed decisions by providing them with additional insights or suggestions.