**Question 1:**

I suggest choosing Agile methodology, because:

1. Requirements characteristics
   * Reliability:
     + It was mentioned clearly in situation that there is a problem about online shopping, and the mobile application is required to deal with that problem.
     + All the requirements are well-defined and possible.
     + After finished, the project can immediately run.

=> The application is expected to be highly reliable.

* + Types and number of requirement:
    - The software requirements include both functional requirements and non-functional requirements.
    - They are defined clearly and not ambiguous or confusion.
    - The number of requirements is not too much.

=> Types and number of requirements defined this mobile application is not too complex.

* + Frequency of requirement may change:
    - The requirements that was mentioned above, is just some features of this application.
    - According to be an online shopping, some of features can be modified and changed.

=> The requirements may change regular to adapt with with the requirements of users.

* + Determination of requirements at an early stage
    - Some of requirements was defined above but it isn’t enough to build a completed system.
    - The organization can be added or removed some of features in the process of project.

=> It is well-defined but not enough.

1. Development team
   * Team size:
     + The situation above mentioned our team have 9 people.
     + It is 6 developers, 2 QA and a project owner who is me.

=> It is a average team size and enough to build a project that was not too complex.

* + Level of understanding of user requirements by the developers:
    - In general, the requirements are clearly and easy to understand.
    - In addition, the organization had contracted with a local company to provide additional resources when need help the requirement more clearly.

=> Our team can easy to understand and build this application well.

1. User involvement
   * The situation mentioned “*The organization had contracted with a local company to provide additional resources when needed*.”
   * User also can review and rating system, they are allowed to providing feedback to the project.

=> The user involvement is highly.

In summary, based on the characteristics mentioned in the context of the software development project, it can be concluded that the **Agile methodology** is the best approach to use. The benefit of Agile over other method, for example like Waterfall is the ability to change dynamically to the customer’s want and needs. The Agile model is not only iterative and incremental, prioritizing flexibility, collaboration but also allow users to feedback at every stage of development. From that, the development team can have an opportunity to apply user’s feedback into future iterations of the product. This customer-centric approach ensures that the final product meets all the requirements of its users. Overall, the Agile/Scrum methodology is well-suited for this mobile application and will likely result in a high-quality end product.

**Question 2:**

I recommend that the team use **black-box testing**. Because the requirements are very clearly, pre-defined and easy to understand.Additionally, there is no mention of the tester's knowledge or experience in the project description. It mean that testers can be non-technical or testers do not need to have detailed knowledge of the system's functionality. From that. choosing black-box testing in here a suitable option. Furthermore, this type of testing does not require specialized expertise from the analyst, as detailed technical knowledge of the system is not necessary

**Question 3:**

* 4 test cases to testing the product:

+ Send in time 100-1000 request order to check the performance.

+ Use in multiple platform website like Chrome, CocCoc, Microsoft Edge to check the responsive and UX/UI.

+ Login by an email that not register yet.

+ Change the language, for example from English to Vietnamese.

**Question 4:**

* The four functional requirements of system are:
  + User are able to share products or their purchases on social media platforms.
  + Users can provide feedback on system and share their experiences with others.
  + User can try on clothes virtually using augmented reality (AR) or virtual reality (VR) to make more informed purchasing decisions.
  + The system is enable to provide styling suggestions and outfit inspiration through curated looks or recommendations based on individual items.
* The two non-functional requirements of system are:
  + The system should maintain user privacy by ensuring that only authorized individuals can access user’s shopping information.
  + The module should be able to handle a growing number of users and tasks without degrading performance or reliability.

**Question 5:**

* The two user stories for this system are:
  + As a user, I want to try on clothes in virtual fitting room so that I can know whether if it suited for my self.
  + As a user, I want to provide feedback on clothes which I buyed so that I can send feedback for the shop who sell them.

**Question 6:**

| Account manager |  | Searching clothes |  | Feedback | |  | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Login | Register | Filter result | Hint to search | | Give feedback | | Feedback | |
| Login by email and password | Verify by email | Filter by destination | Recommend popular outfit or best-seller | | View the feedback | | Input and send feedback | |
| Login by Social media’s account like Instagram, Facebook, TikTok… | Verify by OTP | Filter by cost | Recommend famous shop | | View detail the feedback | | Send message to the shop | |
| Scan QR to login |  |  |  | | Send message to the system if the feedback not satisfied | |  | |

**Question 7:**

The three assumptions regarding the …(chỗ này chỉnh thành feature mà câu hỏi đưa ra) feature are:

* **Uploading a photo** feature is low impact if wrong, low probability of it being wrong.
  + The picture user choose might be not suit with them in real life, but the chane is not high.
  + In the case the clothes is not suited, they are allowed to contact with shop to changing size, so the impact if wrong is low.
* **Using live camera feed** feature is high impact if wrong, low probability of it being wrong.
  + It will connect through camera so the users can make most accuray decision when try on clothes, but if the connect get in trouble, some error can happened and make fitting process mistake.
* **Responding time** feature is low impact if wrong, high probability of it being wrong because The system respond low when many user access to try on at the same time so that the probability is high but low impact because it can impact a little to the efficient of company and they can to improve the system.