

Aspect-Oriented Software Development

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- 1. (7 b)** What significance introducing members into types in AspectJ has from the perspective of implementation and principles of aspect-oriented approach?
- 2. (6 b)** What is the basic use of abstract pointcuts in AspectJ? How can they be used in aspect instantiation?
- 3. (6 b)** How are crosscutting themes designed in the Theme/UML approach?
- 4. (8 b)** Explain the contribution of aspect-oriented programming in the Observer pattern realization.
- 5. (10 b)** Besides other use cases, a use case model of the banking information system comprises two use cases which are related to the direct manipulation with the money on the account, but there are no relationships between them: *Make Deposit* and *Make Withdrawal*. A banking clerk participates in these use cases. How would you realize these use cases using aspect-oriented approach so that they remain present in the code? Demonstrate the technique and outline the code.
- 6. (8 b)** What are the advantages of setting apart business rules into aspects? Introduce an example.