1. Which phase of the Twelve-Factor Methodology contains Port binding? 1 / 1 point

- ○ Code
- ○ Operate
- ◉ Deploy
- ○ Configure

Correct
Correct. Deploy phase of the delivery lifecycle contains: Config, Backing services, Processes, and Port binding.

2. What makes an application concurrent? 1 / 1 point

- ○ It should contain the same backend services across environments
- ◉ It should be stateless
- ○ It should have a minimal process start time
- ○ It should store config in environment variables

Correct
Correct. If processes are stateless and share nothing, an application can start additional processes to scale horizontally and handle the additional workload without creating interdependencies among processes.

3. In a microservice architecture, you should 1 / 1 point

- ○ Create interdependency among services
- ○ Scale all services together
- ◉ Use a different technology stack for each service
- ○ Deploy all services together

Correct
Correct. Teams can choose even different programming languages for different components as they are dependent on each other via an API endpoint.

4. Select the correct answer that completes this sentence: 1 / 1 point

Monolith application has _____ components.

- ○ Independent
- ○ Scalable
- ◉ Interconnected
- ○ Reusable

Correct
Correct. A monolithic application has all or most of its functionality within a single process. Making them tightly connected and dependent on each other.

5. Which component of services design in an SOA architecture defines how the service provider and service consumer should interact? 1 / 1 point

- Own storage
- (•) Contract
- Implementation
- Interface

Correct
Correct. A contract defines how the service provider and service consumer should interact.

6. What is the purpose of Backend For Frontend? 1 / 1 point

- Loading one interface that never reloads
- (•) Customized user experiences
- Service discovery
- Refactoring in stages

Correct
Correct. The BFF pattern allows developers to create and support one backend type per user interface using the best options for that interface rather than trying to support a generic backend that works with any interface but may negatively impact frontend performance.

7. What is the purpose of the Strangler pattern? 1 / 1 point

- Simplifies the front-end experience
- (•) Supports refactoring in stages
- Combine functional domains
- Helps with third-party API integrations

Correct
Correct. With the Strangler pattern, you use the structure of a web application to split an application into multiple functional domains and replace those domains with a new microservices-based implementation for one domain at a time.

8. Larger services should be broken into smaller services when: 1 / 1 point

- Automation is required
- Refactoring is required
- (•) Common data model becomes overly complex
- Functional reusability is required

Correct
Correct. If your data model becomes too broad, it is time to split the service and functionally segregate them.

9. What is the requirement of Microservices? 1 / 1 point

- ○ Its own implementation of auxiliary services like loggings, security, throttling, and so on
- ◉ Independent storage
- ○ Coarse-grained functionality
- ○ Manual deployment process

Correct
Correct. SOA and microservices are both interested in building reusable individual components that can be consumed by other applications. But each microservice requires independent data storage, such as the bounded context.

10. What is the requirement of a development and production environment? 1 / 1 point

- ○ Different source control
- ◉ Similar backing services across the environments.
- ○ Different dependencies
- ○ Embedded access details in code

Correct
Correct. If you use a MySQL database in production, you should use the same version of MySQL database in your development environments.