1. Which of the following best describes Service Discovery?   1 / 1 point

   ○ Prevent an application from repeatedly trying to execute an operation that's likely to fail.

   ○ Maximize the availability of a service across multiple servers.

   ○ A service that controls the flow of scaled service instances.

   ● The client is responsible for determining network locations by querying a service registry.

   > ✓ **Correct**
   > Correct; this is Client Discovery where a client utilizes a registry and creates a subset of services it can access via a load balancer.

2. Which type of Service in Netflix OSS is used to provide client side load balancing for services to delegate to other services?   1 / 1 point

   ● Ribbon

   ○ Feign

   ○ Zuul

   ○ Eureka

   > ✓ **Correct**
   > Correct this is client side load balancing.

3. What type of filters can a Zuul service provide? (Select all that apply)   1 / 1 point

   ☐ EXCEPTION

   ☑ ROUTING

   > ✓ **Correct**
   > Correct; Filters handle routing the request to a destination. This is where an HTTP request is built and sent using Apache HttpClient or Netflix Ribbon.

   ☐ LOGGING

   ☑ PRE

   > ✓ **Correct**
   > Correct; execute before routing to the desired service.

4. Which Netflix OSS project provides functionality for stopping cascade failures across services by implementing the circuit Breaker Pattern?   1 / 1 point

   ● Hystrix

   ○ Feign

   ○ Ribbon

   ○ Zuul

   > ✓ **Correct**
   > Correct; Hystrix provides functionality to implement the Circuit Breaker Pattern and provide fallback operations.

5. Which Netflix OSS project provides functionality for Routing services?

- ⦿ Zuul
- ○ Feign
- ○ Ribbon
- ○ Hystrix

> ✓ **Correct**
> Correct; this is a Gateway or Edge service providing a front door to route requests via Ribbon on to other services through filters.

6. Which annotation will scan for Hystrix in your service project?

- ○ @HystrixCommand
- ○ @EnableEurekaServer
- ⦿ @EnableCircuitBreaker
- ○ @EnableDiscoveryClient

> ✓ **Correct**
> Correct; this starts scanning for any circuit breaker implementation on the classpath, such as Hystrix.

7. Which annotation indicates the Rest template should be based on Client Side Load Balancing?

- ○ @EnableEurekaServer
- ○ @Bean
- ○ @RibbonClient
- ⦿ @LoadBalanced

> ✓ **Correct**
> Correct; this allows the RestTemplate uses Ribbon and checks Eureka server for resolving the service name to host/port.

8. Which method in ZuulFilter do we override to execute the filter logic?

- ○ shouldFilter
- ○ filterType
- ○ filterOrder
- ⦿ run

> ✓ **Correct**
> Correct; contains the functionality of the filter.

9. Which annotation is used to forward calls to other services via a client load balancer such as Ribbon? **1 / 1 point**

- ○ @EnableEurekaServer
- ● @EnableZuulProxy
- ○ @RibbonClient
- ○ @EnableDiscoveryClient

> ✓ **Correct**
> True, this creates a proxy that forwards relevant calls to other services using Ribbon.

10. What in the services local registry is encapsulated away from your code when you call a service behind a Load balancer? **1 / 1 point**

- ● The service IP Address.
- ○ The protocol.
- ○ The PathVariables of the desired endpoint.
- ○ The service id or name.

> ✓ **Correct**
> Correct; An Internet Protocol address is a numerical label such as 172.16.254.1 that is connected to a computer network that uses the Internet Protocol for communication and is static so we do not want to expose that as services are dynamically allocated IP addresses.