# Exam AZ-201: Microsoft Azure Developer Advanced Solutions (beta) – Skills Measured

# **Develop for an Azure cloud model (50-55%)**

## **Develop for asynchronous processing**

• May include but not limited to: Implement parallelism, multithreading, processing, durable functions, Azure logic apps, interfaces with storage, interfaces to data access, and appropriate asynchronous compute models

## **Develop for autoscaling**

 May include but not limited to: Implement autoscaling rules and patterns (schedule, operational/system metrics, code that addresses singleton application instances, and code that addresses transient state

## **Develop long-running tasks**

• May include but not limited to: Implement large-scale, parallel, and high-performance apps by using batches; implement resilient apps by using queues; implement code to address application events by using web hooks; address continuous processing tasks by using web jobs

## **Implement distributed transactions**

 May include but not limited to: Identify tools to implement distributed transactions (e.g., ADO.NET, elastic transactions, multi-database transactions); manage transaction scope; manage transactions across multiple databases and servers

#### **Enable search of textual content**

• May include but not limited to: Create an Azure Search index by using code, Azure Portal, etc.; import searchable data by using code, Azure Portal, etc.; query the Azure Search index by using code

#### Instrument an app or service and implement logging

 May include but not limited to: Configure instrumentation in an app or service by using Application Insights and other tools; configure logging service by using Application Insights, Azure Alerts, Azure Dashboards, Metrics Explorer, and other tools (e.g., ELK)

# Implement cloud integration solutions (25-30%)

### Manage APIs by using API Management (APIM)

 May include but not limited to: Analyze recommendations on security center; create an APIM instance; configure authentication for APIs; create an API gateway; define policies for APIs

## Configure a message-based integration architecture

May include but not limited to: Configure an app or service to send emails, Event Grid, and
the Azure Relay Service; create and configure a Notification Hub, an Event Hub, and a
Service Bus; configure queries across multiple products; configure an app or service with
Microsoft Graph

## Develop an application message model

• May include but not limited to: Create a message schema and a message exchange; create an event model; create topics and subscriptions

## **Develop Azure Cognitive Services, Bot, and IoT solutions (20-25%)**

## **Integrate Azure Cognitive Services in an application**

• May include but not limited to: Develop solutions by using intelligent algorithms that identify items from images and videos; develop solutions by using intelligent algorithms related to speech, natural language processing, Bing Search, and recommendations and decision making

## **Create and integrate bots**

 May include but not limited to: Create a bot by using the Bot Framework; create a natural language conversation flow; manage bots by using the Azure Portal; register a bot by using the Bot Framework

#### **Create and implement IoT solutions**

• May include but not limited to: Configure Azure Time Series Insights; configure Stream Analytics service for inputs and outputs; establish bidirectional communication with IoT devices by using IoT Hub; register devices with IoT Hub Device Provisioning Service