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NPTEL (<https://swayam.gov.in/explorer?ncCode=NPTEL>) » Google Cloud Computing Foundations  
(course)



## Course outline

How does an NPTEL online course work?

**Week 0:**  
Welcome to the Course

**Week 1: What's the cloud anyway? Start with a solid platform**

**Week 2: Use GCP to build your apps**

● Introduction  
(unit?unit=38&lesson=39)

● Compute Options in the Cloud  
(unit?unit=38&lesson=39)

# Assignment 2

The due date for submitting this assignment has passed.

**Due on 2020-09-30, 23:59 IST.**

## Assignment submitted on 2020-09-30, 15:26 IST

1) The predefined machine types do not fit your application requirement. What is the best **1 point** solution for this case?

- ☐ Setup autoscaling.
- ☒ Create a custom virtual machine that fits your requirements
- ☐ Over allocate resources for the instance
- ☐ Do nothing, the instance will size itself.

Yes, the answer is correct.

Score: 1

Feedback:

*Custom machine types are useful when none of the pre-defined options meet your needs or you need to use GPUs or a specific CPU platform*

Accepted Answers:

*Create a custom virtual machine that fits your requirements*

2) True or False. Compute Engine is billed for the first minute at boot-time and then per **1 point** second of use

- ☒ True
- ☐ False

Yes, the answer is correct.

lesson=40)

- Exploring IaaS with Compute Engine [With Lab] (unit?unit=38&lesson=41)

- Configuring Elastic Apps with Autoscaling (unit?unit=38&lesson=42)

- Exploring PaaS with App Engine [With Lab] (unit?unit=38&lesson=43)

- Event Driven Programs with Cloud Functions [With Lab] (unit?unit=38&lesson=44)

- Containerizing and Orchestrating Apps with GKE (unit?unit=38&lesson=45)

- Summary (unit?unit=38&lesson=47)

- Google Cloud Computing Foundations Course : Week 2 Feedback Form (unit?unit=38&lesson=48)

- Quiz :

**Assignment 2**

(assessment?name=127)

Score: 1

Feedback:

*The answer is True. Compute Engine bills for a minimum of 1 minute of usage, so if you use an instance for 30 seconds of uptime, you are billed for 1 minute. After 1 minute, your instance is billed on a per-second basis.*

Accepted Answers:

True

3) True or False. Java is a runtime option for Cloud Functions.

**1 point**

- ☒ True  
☐ False

Yes, the answer is correct.

Score: 1

Feedback:

*The answer is True. Cloud Functions supports code written in Java, Go, Python, and Node.js.*

Accepted Answers:

True

4) True or False? Local SSD disks are ephemeral

**1 point**

- ☒ True  
☐ False

Yes, the answer is correct.

Score: 1

Feedback:

*This answer is True. Local SSD disks are ephemeral. If the VM is shut down or crashes, the disk gets destroyed.*

Accepted Answers:

True

5) Which of the following options provides the customize runtimes for App Engine by supplying a custom Docker image or Dockerfile from the open source community.

**1 point**

- ☐ App Engine Standard  
☐ App Engine Internal  
☐ Google Kubernetes Engine  
☒ App Engine Flexible

Yes, the answer is correct.

Score: 1

Feedback:

*App Engine Flexible allows for custom runtimes by supplying a custom Docker image or Dockerfile from the open source community with the use of persistent disks, and the ability to log into the infrastructure*

Accepted Answers:

App Engine Flexible

6) Google Kubernetes Engine is built on the open-source Kubernetes system. Which of the following statements best describes what Kubernetes is?

**1 point**

**Week 3 : Where**

## do I store this Stuff?

**Week 4: There's an API for that! You can't secure the Cloud right?**

**Week 5 : It helps to Network**

**Week 6 : It helps to Network (continued)**

**Week 7 : Let Google keep an eye on things. You have the data, but what are you doing with it**

**Let machines do the work**

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- ☒ An orchestration engine to manage containers.
- ☐ A virtualization platform.
- ☐ A format of container
- ☐ An execution environment for building and connecting cloud services.

Yes, the answer is correct.

Score: 1

Feedback:

*Kubernetes is used for container orchestration. It helps you manage your containerized application environment*

Accepted Answers:

*An orchestration engine to manage containers.*

7) True or False. Cloud Monitoring metrics can be used to trigger an autoscaling event **1 point**

- ☐ True
- ☒ False

No, the answer is incorrect.

Score: 0

Feedback:

*The answer is True. Cloud Monitoring metrics, CPU usage, and load balancer usage are all examples of triggers for an autoscaling event*

Accepted Answers:

*True*

8) Which of the following can trigger Cloud Functions ? **1 point**

- ☐ App Engine notification
- ☒ Webhook
- ☐ Stackdriver alert
- ☐ Email

Yes, the answer is correct.

Score: 1

Feedback:

*Cloud Functions can be triggered by a webhook, an action to a Cloud Storage bucket, or a message in Cloud Pub/Sub.*

Accepted Answers:

*Webhook*

9) Time-to-market is highly valuable to you and you want to be able to focus on writing code without ever having to touch a server, cluster, or infrastructure. Which service suits your needs? **1 point**

- ☐ Google Kubernetes Engine
- ☐ Google Compute Engine
- ☐ BigQuery
- ☒ App Engine

Yes, the answer is correct.

Score: 1

Feedback:

*App Engine is a PaaS option. The only part of the infrastructure you manage is your code.*

Accepted Answers:

*App Engine*

10) Which of the following is the container format used with Google Kubernetes Engine? **1 point**

- ☐ Rocket
- ☐ Glassfish
- ☒ Docker
- ☐ Spinnaker

Yes, the answer is correct.

Score: 1

Feedback:

*Docker is the container format of choice for GKE. Spinnaker, Rocket, and Glassfish are not container formats*

Accepted Answers:

*Docker*