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| **GCP-430 Getting Started with Google Kubernetes Engine**  **(Answers)** |

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| **No** | **Questions** | **Points** |
| 1 | **Which of the following best describes the function of containers?**   |  |  |  | | --- | --- | --- | | (x) | They virtualize the operating system |  | | ( ) | They virtualize the hardware |  | | ( ) | They allow you to save and move applications to new hardware |  | | ( ) | They remove the need for application dependencies |  | | 10 pts |
| 2 | **Which of the following are advantages of using containers over virtual machines? (Choose 3)**   |  |  |  | | --- | --- | --- | | [x] | The application images are smaller and more portable |  | | [x] | They make it easier to develop micro-services |  | | [x] | Development, Staging and Production configurations are identical |  | | [ ] | They abstract the computer hardware layer |  | | 10 pts |
| 3 | **You must use Google Container Registry when orchestrating containers with Kubernetes.**   |  |  |  | | --- | --- | --- | | ( ) | True |  | | (x) | False |  | | 10 pts |
| 4 | **Multiple containers can use the same underlying operating system image.**   |  |  |  | | --- | --- | --- | | (x) | True |  | | ( ) | False |  | | 10 pts |
| 5 | **Which kubernetes component is responsible for doing health checks?**   |  |  |  | | --- | --- | --- | | (x) | Kubelet |  | | ( ) | Node |  | | ( ) | Pod |  | | ( ) | Service |  | | 10 pts |
| 6 | **Which kubernetes component can function as a load-balancer for pods in an application?**   |  |  |  | | --- | --- | --- | | (x) | Service |  | | ( ) | Node |  | | ( ) | Pod |  | | ( ) | Kubelet |  | | 10 pts |
| 7 | **What option can you use to identify specific pods within an application?**   |  |  |  | | --- | --- | --- | | (x) | labels |  | | ( ) | node |  | | ( ) | service |  | | ( ) | app name |  | | 10 pts |
| 8 | **What kubernetes resource can you use to share data between pods?**   |  |  |  | | --- | --- | --- | | (x) | volume |  | | ( ) | service |  | | ( ) | label |  | | ( ) | node |  | | 10 pts |
| 9 | **What option in a YAML file allows you to designate the number of pods a deployment should have?**   |  |  |  | | --- | --- | --- | | (x) | ReplicaSet, replicas |  | | ( ) | Deployment, replicas |  | | ( ) | Pod, replicas |  | | ( ) | App, replicas |  | | 10 pts |
| 10 | **Scaling a deployment does NOT trigger a new rollout.**   |  |  |  | | --- | --- | --- | | (x) | True |  | | ( ) | False |  | | 10 pts |
| 11 | **A Canary deployment of an application will work witha subset of live, unaltered user connections.**   |  |  |  | | --- | --- | --- | | (x) | True |  | | ( ) | False |  | | 10 pts |
| 12 | **A Blue-Green deployment of an application uses the labels on a service to switch traffic to a new deployment**   |  |  |  | | --- | --- | --- | | (x) | True |  | | ( ) | False |  | | 10 pts |
| 13 | **Which GCP resource can automatically build new images by detecting changes to application code?**   |  |  |  | | --- | --- | --- | | (x) | Cloud Build |  | | ( ) | Docker |  | | ( ) | GitHub |  | | ( ) | Kubernetes Master Node |  | | 10 pts |
| 14 | **What open-source CI/CD tool can be used to build a pipeline for updating apps in Kubernetes?**   |  |  |  | | --- | --- | --- | | (x) | Spinnaker |  | | ( ) | Jenkins |  | | ( ) | Cloud Build |  | | ( ) | Cloud Functions |  | | 10 pts |
| 15 | **What command can you use to verify that a kubernetes cluster is running from Cloud Shell?**   |  |  |  | | --- | --- | --- | | (x) | gcloud container clusters list |  | | ( ) | gcloud kubernetes clusters list |  | | ( ) | gcloud compute clusters list |  | | ( ) | gcloud managed clusters list |  | | 10 pts |
| 16 | **Jenkins is deployed to Kubernetes as an application.**   |  |  |  | | --- | --- | --- | | (x) | True |  | | ( ) | False |  | | 10 pts |