

Test Name : May2021_EndTerm_CS816 Software_Production_Engineering

Name : Divyansha Agrawal - divyansha.agrawal@iiitb.org

Test Start Time

2021-05-10 08:30:30

Marks Scored

41.0 / 50.0

Total Questions

17

Attempted Questions

16

Correct Questions

14

Incorrect Questions

2

Skipped Questions

1

Pending Evaluation

0

Reevaluation application status

Not Applied

Actions

Apply for reevaluation

List of Sections

Part A

Marks per question : 10.0

Marks Scored : 19.0

Q No.	Q. Type	Status	Marks	Comment
1	File Upload	✓	9.0	Missing output from the explanation.

Hide Answer

Explain ELK stack with architecture diagram. Draw logstash architecture and explain inputs, filters, and outputs in it.

Uploaded File Details

19cb05da-30df-e3dd-c538-de7a7b04f5f0.pdf

Page: 1 / 3

Zoom: 100%

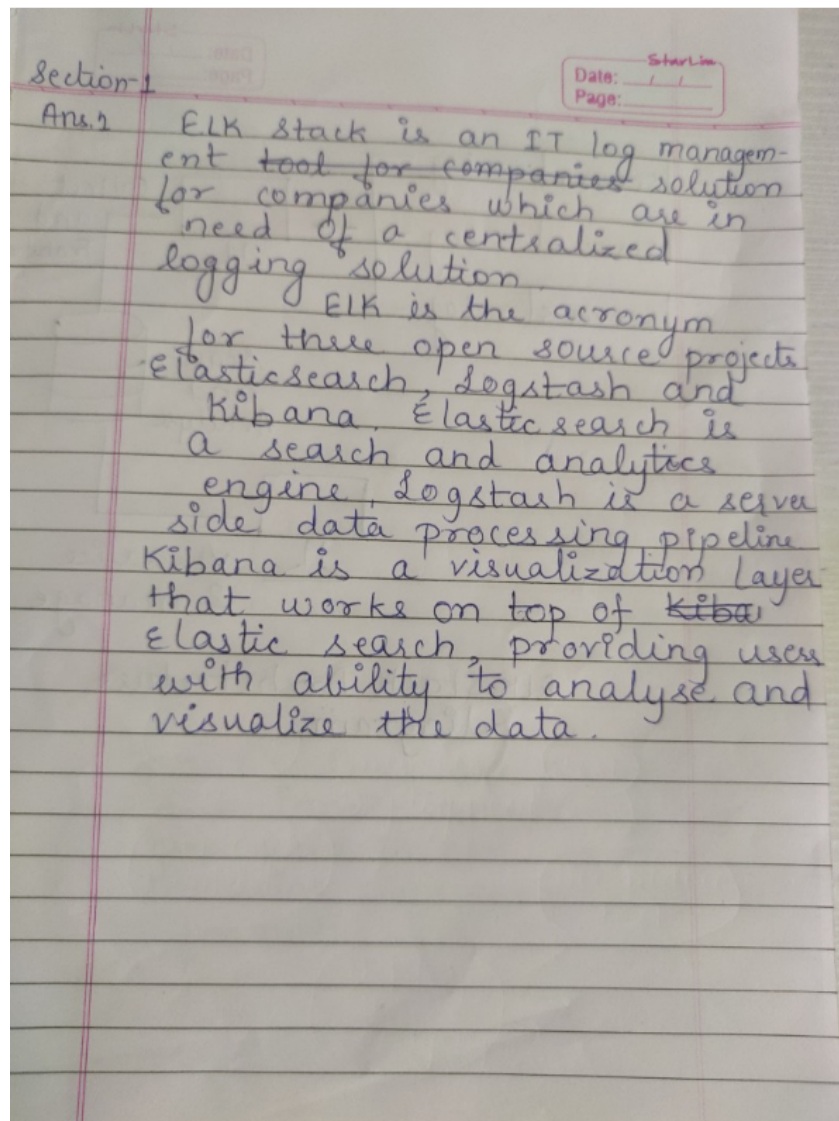
Section-1

Date: / /
Page:

Ans.1

ELK stack is an IT log management tool for companies solution for companies which are in need of a centralized logging solution.

ELK is the acronym for three open source projects: Elasticsearch, Logstash and Kibana. Elasticsearch is a search and analytics engine. Logstash is a server-side data processing pipeline. Kibana is a visualization layer that works on top of ~~Kiba~~ Elasticsearch, providing users with ability to analyse and visualize the data.



2

File Upload



10.0

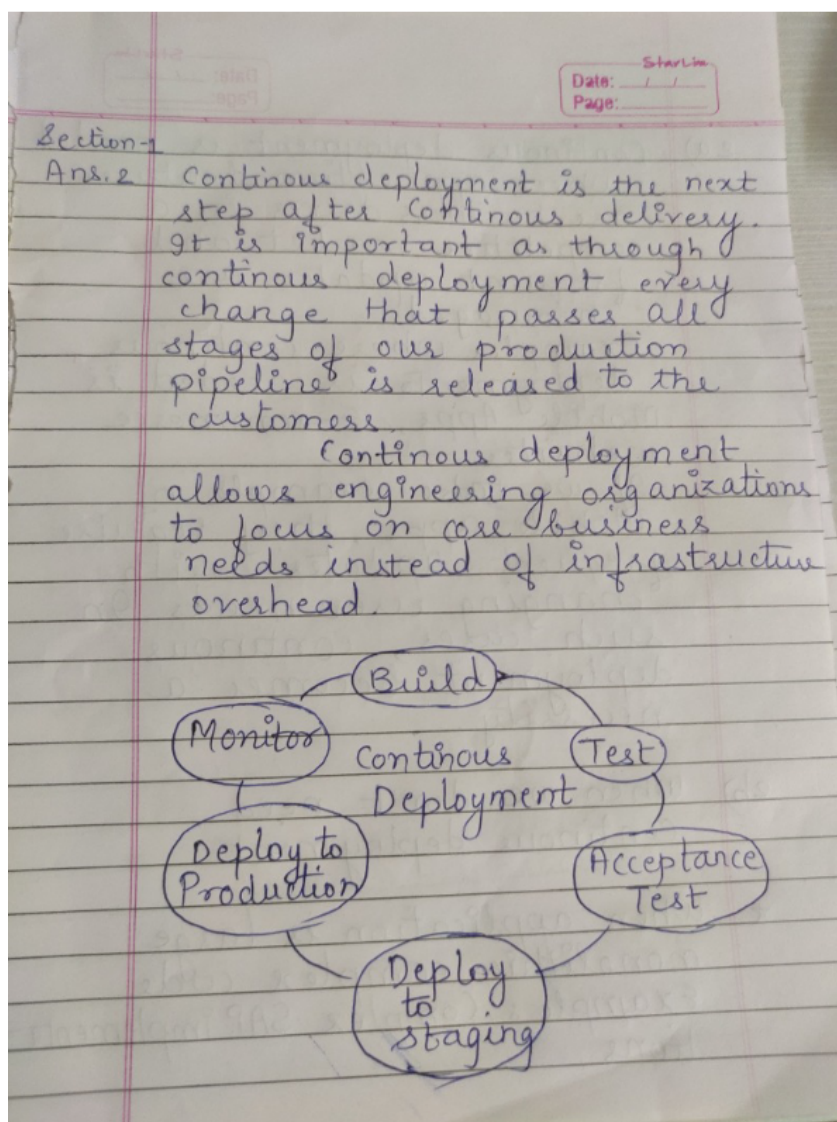
Well written.

Hide Answer

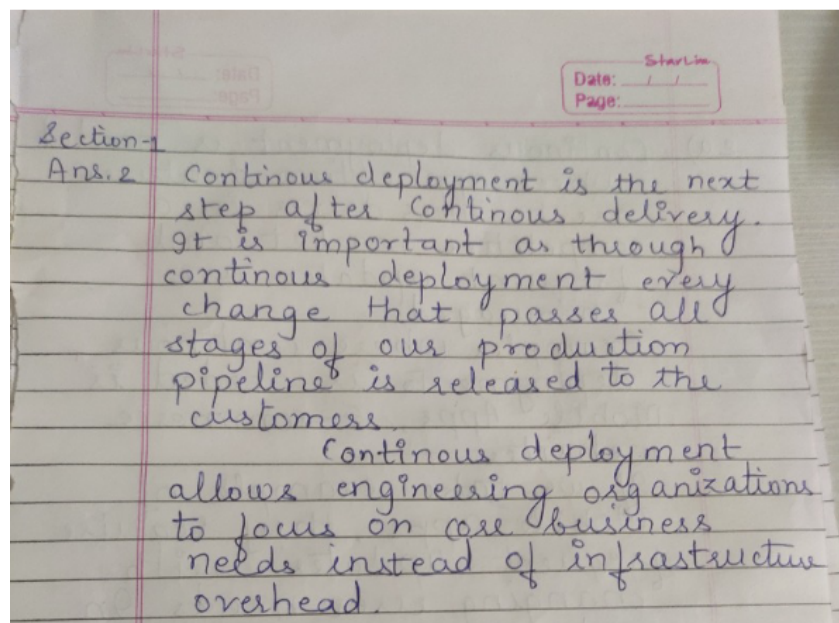
What is Continuous Deployment and answer the following questions:

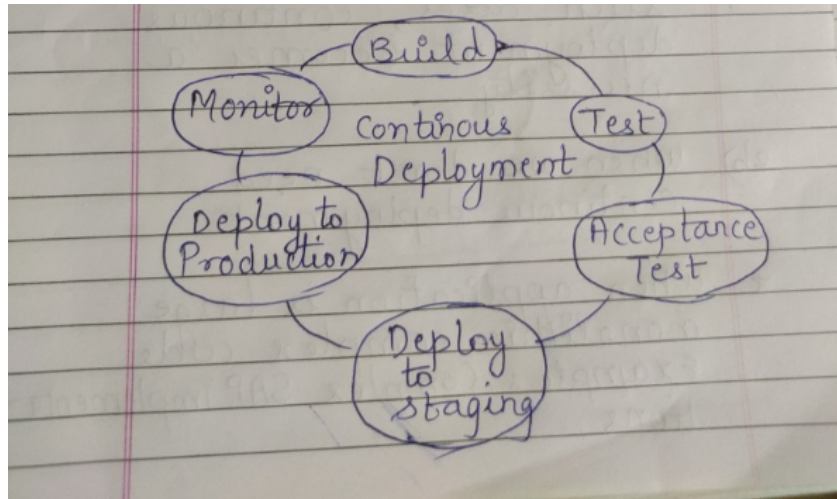
- Explain with an example where you would require continuous deployment.
- Where you won't need continuous deployment.
- Key functions of deployment automation tools?

Uploaded File Details



Evaluated Version





Part B

Marks per question : 2.0

Marks Scored : 22.0

Negative marks per question : 50%

Q No.	Q. Type	Status	Marks	Comment
1	Multiple Choice - Single Answer	✗	-1.0	-
You want to containerize your database, but you have to make sure that your persistent data is not lost when the container gets destroyed or self-heals, how would you manage that?				
<input type="radio"/> Use docker volumes to map to the container				
<input checked="" type="radio"/> Add docker storage driver while building the docker image.				
<input type="radio"/> Database cannot be migrated to a container				
<input type="radio"/> Add WORKDIR instruction in your Dockerfile				
2	Multiple Choice - Single Answer	✓	2.0	-

Why is the index pattern required in kibana in ELK?

- ☐ To use grok plugin to match the custom field added in the logged event.
- ☒ To access the elasticsearch data
- ☐ To identify the field logged in logstash conf file.
- ☐ To add various filters and discover search results.

3

Multiple
Choice -
Single
Answer



2.0

-

Hide Answer

Which of the following is NOT part of Ansible's Automation Engine?

- ☐ inventory
- ☒ playbook
- ☐ plugins
- ☐ modules

4

Multiple
Choice -
Single
Answer



0.0

-

Hide Answer

You want to connect your microservices to one another to manage their API calls. What's the best way to solve this challenge?

- ☐ This cannot be done without the use of a reverse proxy server
- ☐ Manipulate the iptables rules on Linux
- ☐ Remove the network isolation by assembling microservices in the host network
- ☒ Connect microservices via services name under the same network

5

Multiple
Choice -
Single
Answer



2.0

-

Hide Answer

What does 'become:yes' mean in Ansible playbooks?

- ☒ It means that we would run all commands as root
- ☐ It means that the command must be retried until it succeeds as sudo user
- ☐ It means that the service needs to be started once installed
- ☐ It means that the managed node should become controller node user

6

Multiple



2.0

-

Hide Answer

Choice -
Single
Answer

Your team is working on 100 nodes, and you want to first configure then deploy your application on those nodes. Which deployment tool you'll be using?

- ☐ Jenkins
- ☐ Docker
- ☐ Git
- ☒ Ansible

7

Multiple
Choice -
Single
Answer



2.0

-

Hide Answer

Why would you NOT choose Container over VM?

- ☐ Simplify application delivery
- ☒ Monolithic workloads
- ☐ Smaller storage and network footprint
- ☐ Setting resource utilization limits

8

Multiple
Choice -
Single
Answer



2.0

-

Hide Answer

_____ provides virtual machines, virtual storage, virtual infrastructure, and other hardware assets.

- ☐ PaaS
- ☒ IaaS
- ☐ SaaS
- ☐ CaaS

9

Multiple
Choice -
Single
Answer



2.0

-

Hide Answer

Which of the following files defines the actions that Ansible performs on managed nodes?

- ☒ Playbook
- ☐ Host inventory

☐ Configuration

☐ Modules

10

Multiple
Choice -
Single
Answer



2.0

-

Hide Answer

You're deploying the latest changes to your production server, but your deployment goes wrong, which of the following options you'll go for first?

☒ Follow the rollback strategy

☐ Try to fix the bugs and deploy the fixed code

☐ Rerun your deployment pipeline with the valid arguments

☐ Pray that you don't get fired

11

Multiple
Choice -
Single
Answer



2.0

-

Hide Answer

Passwords, Passphrases and Private keys stored in the _____ facility of Rundeck.

☒ Key Storage

☐ Access Control

☐ Password Utility

☐ System Configuration

12

Multiple
Choice -
Single
Answer



2.0

-

Hide Answer

As a DevOps Engineer, why would you create a Rundeck Job?

☐ To run a configuration management tool on a controller node.

☐ To run an ad hoc command on your local or remote nodes

☐ To run a set of commands or scripts on your local or remote nodes

☒ All of the mentioned

13

Multiple
Choice -
Single
Answer



2.0

-

Hide Answer

Which of the following is/are example/s of the Centralized Runbook Automation System?

☐ Chef

☒ Rundeck

☐ Ansible

☐ Jenkins

14

Multiple
Choice -
Single
Answer



-1.0

-

Hide Answer

You want to switch from the old version to the new version in blue-green deployment, what's the correct way?

☐ Change load balancer or router settings.

☒ Changing the DNS record pointing to the latest deployment.

☐ Takedown blue deployment.

☐ Flipping blue/green switches at the server level.

15

Multiple
Choice -
Single
Answer



2.0

-

Hide Answer

Rundeck by default uses _____ to execute commands on remote nodes.

☒ SSH

☐ API

☐ ISCSI

☐ TELNET