

Total No. of Questions : 5]

SEAT No. :

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[6027]-41

Second Year M.C.A. (Management)

COMPUTER MANAGEMENT

421 : IT41-DevOps

(2020 Pattern) (Semester - IV)

Time : 2½ Hour]

[Max. Marks : 50

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*

Q1) A) Multiple choice questions.

[10]

a) What is DevOps?

- i) DevOps is a concept to enable a proper working environment to engineers from various verticals.
- ii) DevOps is an IT boom that promises nice career opportunities and helps learn complex concepts easily.
- iii) DevOps stands for D.E.V.O.P.S. acronym i.e Developers Ease Via Optimized Platform Solutions.
- iv) DevOps is a software engineering culture that unites development and operation teams.

b) What is Code-Commit?

- i) A promise to ensure that the developer will push the code by the end of the SDLC.
- ii) A way to record the changes to a repository and add a log message to describe the changes that were made.
- iii) A QR code gets generated and gets pushed to github. The process is code-commit.
- iv) It is a commitment to ensure that the developer codes in an efficient yet reliable manner ensuring all coding protocols are followed.

P.T.O.

- c) Iaas stands for?
- Internet as a solution
 - Infrastructures as a solution
 - Infrastructure as a service
 - Internet as a service
- d) IaC stands for.
- Infrastructure as a Code
 - Infrastructure as a Commit
 - Infrastructure as a Concept.
 - Infrastructure as a Configuration
- e) Which of the following is not a hypervisor provider
- VM Ware
 - Oracle virtual Box
 - Virtual win
 - Microsoft virtual pc
- f) Which of the following is a DevOps toolset?
- Docker, Chef, Maven, Git
 - MS-Office, Windows10, Power DVD.
 - Mozilla FireFox, Thunderbird, Outlook
 - Tor, Bitwarden, Ubuntu10.10
- g) The Creator Git its :
- Dennis Ritchie
 - Benjamin Franklir.
 - Steve jobs
 - Linus Torvalds
- h) Linux architecture consist of
- Unix, Core, Mantle, Shell
 - Hardware, Kernel, Shell, Applications
 - Os, User, Input device, Output device
 - DB, Backend, Frontend and Load Balancer
- i) This linux command tells the name of the user currently logged in?
- Who are you
 - Whoami
 - What is your name
 - Username

- j) The Command “PWD” is used to:
- i) Reset the password of the user
 - ii) Display the passwords of the user
 - iii) Password protect a file
 - iv) Print working directory.
- k) Which of the following OS does Docker run on ?
- i) Linux
 - ii) Windows
 - iii) Mac OS
 - iv) All of the above
- l) Which Maven plugin creates the project structure?
- i) Dependency
 - ii) Properties
 - iii) Archetype
 - iv) Execution
- m) What are the useful plugins in Jenkins?
- i) Maven 2 Project
 - ii) Amazon EC2
 - iii) HTML Publisher
 - iv) All of the above
- n) Which of the following types of version Control Systems?
- i) Local Version Control Systems
 - ii) Distributed Version Control System
 - iii) Centralized Version Control Systems
 - iv) All of the above
- o) Which of the following statements Defines feature flags?
- i) Feature flags define which part of an app are deployed during the build process.
 - ii) Feature flags define the capabilities for various versions of an application.
 - iii) Feature flags are place holders for future functionality for an app.
 - iv) Feature flags allow you to show or hide features in an app

- p) Identify the methodologies does least impact the establishment of DevOps methodology?
- Waterfall software delivery
 - Lean Manufacturing
 - Continuous Software Delivery
 - Agile Software Delivery.
- q) Who is known as the father of DevOps?
- Liam Debois
 - Patrick Debois
 - Walter Dandy
 - None of these
- r) Which of the following is not a part of develops life cycle_____.
- Code
 - Plan
 - Build
 - Operating
- s) _____ is something that is used for streamlining the development and deployment process.
- Continuous Delivery
 - Continuous Integration
 - Continuous test
 - Continuous Intervention
- t) _____ is a combination of multiple pieces working together to become an automation tool.
- Bugzilla
 - Chef
 - Ansible
 - Git

- Q2)** a) Explain SDLC Models, Lean, ITIL and Agile in details. [6]
 b) Write a short note on configuration management. [4]

OR

- a) Write the RPM and YUM installation in details. [6]
 b) Differentiate between DevOps & Agile. [4]

Q3) a) What is the difference between Git and Gittlub? [4]

b) Explain: [6]

- i) Creating the branches
- ii) Switching the branches
- iii) Merging the branches of git

OR

a) Differentiate between CVCS and DVCS. [4]

b) Explain 7C's of DevOps with suitable diagram. [6]

Q4) a) Explain Chef Components in details. [5]

b) Explain Chef Architecture with suitable diagrams. [5]

OR

a) Discuss the core concepts of Maven. [5]

b) Explain Maven plugins in details. [5]

Q5) a) What is the lifecycle of a Docker container? Explain in details. [5]

b) Explain the methods to upload the images in docker registry and AWS. [5]

OR

a) Name and explain the various Docker Components in details. [5]

b) Explain docker networking. [5]

- i) Accessing containers.
- ii) Linking containers.

