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UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, July 2020

Programme Name: B.Tech CS+DevOps	**Semester : IV**
Course Name : Build and Release Management	**Time : 02 hrs**
Course Code : CSDV 2002	**Max. Marks : 100**
Nos. of page(s) :	

Instructions:

SECTION A (20 Marks)

S. No.		Marks	CO
Q1.	In which environment a build switch after UAT phase? a) QA b) STAGING c) DEV d) PRODUCTION	1.5	CO3
Q2.	UAT environment for a build is accessible for which of the following team. a) Development b) Testing c) Business Users d) None	1.5	CO4
Q3.	Which is not a build management process? a) Build Execution b) Build Definition c) Build Reporting d) Build Testing	1.5	CO1
Q4.	Which is not a way for build execution? a) Manual Invocation b) Automatic Schedule c) Source Code Trigger d) Automatic Invocation	1.5	CO1
Q5.	Which of the following build execution result is not recorded in Build Reporting? a) Compilation reports b) Acceptance Testing Report c) Unit Test reports d) Release Report	1.5	CO2
Q6.	Which is not a Build life cycle phase? a) Clean b) Compile c) Execute	1.5	CO1

	d) Test		

Q7.	In which build phase, only latest or agreed on code changes are build.
	   a) Build Definition
	   b) Build Execution
	   c) Build Identification
	   d) Build Reporting
		1.5	**CO1**

Q8.	Which is not a phase in Release Management?
	   a) Release Planning
	   b) Release Scheduling
	   c) Release Authorization
	   d) Release Packaging
		1.5	**CO4**

Q9.	What is the advantages of Release Management?
	   a) Configuration Management
	   b) Testing Management
	   c) Query Management
	   d) None
		1.5	**CO4**

Q10.	Code signing and sign off criteria for release involved in which phase of release management?
	   a) Release Planning
	   b) Release Authorization
	   c) Release Deployment
	   d) Release Packaging
		1.5	**CO3**

Q11.	Scope and Content of a release is set in which phase of Release Management
	   a) Release Planning
	   b) Release Authorization
	   c) Release Deployment
	   d) Release Packaging
		1.5	**CO4**

Q12.	Approval is performed in which phase of Release Management?
	   a) Release Deployment
	   b) Release Planning
	   c) Release Authorization
	   d) Release Packaging
		1.5	**CO4**

Q13.	Which is not basic element of POM?
	   a) Project
	   b) modelVersion
	   c) ArtifactID
	   d) ArtifactName
		1.5	**CO2**

Q14.	Which of the following repository is maintained by private organization?
	   a) Local
	   b) Remote
	   c) Central
	   d) None of them
		1.5	**CO2**

Q15.	What is the location of local repository in user system?
	   a) user_home/.m2/repository
	   b) user_home/repository/.m2
	   c) user_home/maven/repository
		1.5	**CO2**

	d) user_home/repository/maven		

Q16.	Which is the default repository used in maven?
	    a) Local
	    b) Remote
	    c) Central
	    d) None
		1.5	CO2

Q17.	Which is not a type of dependency scope?
	    a) Test
	    b) Compile
	    c) Provided
	    d) Package
		1.5	CO3

Q18.	Select the phase from following, in which artifact is not searched in repository.
	    a) Test
	    b) System
	    c) Runtime
	    d) Compile
		1.5	CO4

Q19.	Why maven is extremely powerful?
	    a) Transitive Dependency Feature
	    b) Build Management Feature
	    c) Central Repository Feature
	    d) None
		1.5	CO3

Q20.	Which is not a feature of Transitive Dependency?
	    a) Dependency Mediation
	    b) Dependency Score
	    c) Dependency Searching
	    d) Excluding Dependency
		1.5	CO4

Q21.	Which is not a type of product documentation?
	    a) Requirement Documentation
	    b) User Manual
	    c) Source Code
	    d) Scheduling Documentation
		1.5	CO4

Q22.	Which is not a stage in site plugin?
	    a) Generating a Site
	    b) Running a site
	    c) Staging a site
	    d) Testing a Site
		1.5	CO4

Q23.	Which is not a phase in Maven Site Lifecycle?
	    a) Site
	    b) Pre-site
	    c) Site-Test
	    d) Site-Deploy
		1.5	CO1

Q24.	Which protocol is not used in maven3?
	    a) HTTP
	    b) HTTPS
	    c) FTP
	    d) TCP
		1.5	CO2

Q25.	Which is not a JUnit annotation?
	   a) @Test
	   b) @BeforeClass
	   c) @Run
	   d) @After
		1.5	**CO3**

Q26.	Which is not a code coverage criteria?
	   a) Condition Coverage
	   b) Loop Coverage
	   c) Inheritance Coverage
	   d) Exception Coverage
		1.5	**CO3**

Q27.	Which is not a code coverage tool?
	   a) Emma
	   b) Jacoco
	   c) Cobertura
	   d) Nagios
		1.5	**CO3**

Q28.	Which kind of testing is performed in Code coverage?
	   a) System Testing
	   b) Unit Testing
	   c) API Testing
	   d) JUnit Testing
		1.5	**CO3**

Q29.	How many phases are in Release Life cycle?
	   a) Four
	   b) Three
	   c) Five
	   d) Six
		1.5	**CO4**

Q30.	High priority bugs can be fixed in Release Candidate?
	   a) True
	   b) False
		1.5	**CO4**

Q31.	How do I determine which POM contains missing transitive dependency?
	   a) mvn -A
	   b) mvn -X
	   c) mvn -R
	   d) mvn -M
		1.5	**CO4**

Q32.	If no packaging value has been specified in POM, what will the default?
	   a) jar
	   b) POM
	   c) ear
	   d) war
		1.5	**CO2**

Q33.	Maven Plugins are generally used to:
	   a) compile code files.
	   b) unit testing of code.
	   c) Both
	   d) None
		1.5	**CO2**

Q34.	State True or False It is not possible to change the default repository of maven. a) True	**1.5**	**CO2**

	b) False		

Q35.	There should be a single POM file for each project.
	    a) No
	    b) Yes
		2.5	**CO2**

Q36.	What is a SNAPSHOT version?
	    a) The SNAPSHOT is 'older' than its release.
	    b) The 'latest' code along a development branch.
	    c) Provides no guarantee the code is stable or unchanging
	    d) All of These
		2.5	**CO1**

Q37.	What of the following is true about POM?
	    a) It is fundamental Unit of Work in Maven.
	    b) It is an XML file.
	    c) Both of the above.
	    d) None of the above
		2.5	**CO3**

Q38.	Which generates source code to be included in compilation phase?
	    a) generate-test-sources
	    b) generate-sources
	    c) generate-auto-configuration
	    d) generate-resources
		2.5	**CO3**

Q39.	Which is not true about Apache maven compare to Apache ant?
	    a) Ant doesnot have formal project directory structure but maven has.
	    b) Ant doesnot have lifecycle but maven has.
	    c) Ant is a toolbox whereas maven is framework.
	    d) Ant scripts are reuseable but maven plugins are not.
		2.5	**CO2**

Q40.	what would the "jar:jar" goal do?
	    a) It always recompile resources after that create jar from target/classes.
	    b) It is an invalid maven goal.
	    c) None of these
	    d) It does not recompile resources hence create jar from target/classes.
		2.5	**CO3**

Q41.	Which of the following phases is not present in 'clean' Maven life cycle?
	    a) clean
	    b) test-clean
	    c) pre-clean
	    d) all are present
		2.5	**CO2**

Q42.	Which of the following is true about 'build' Maven life cycle?
	    a) It cleans up artifacts created by prior builds.
	    b) This is used to make jar file of the application.
	    c) This generates site documentation for the project.
	    d) None
		2.5	**CO1**

Q43.	Which of the following is not a maven goal?
	    a) clean
	    b) debug
	    c) package
	    d) install
		2.5	**CO2**

Q44.	Which of the following is correct about Goal in Maven? a) A goal represents a specific task which contributes to the building and	**2.5**	**CO4**

	managing of a project. b) It may be bound to zero or more build phases. c) A goal not bound to any build phase could be executed outside of the build lifecycle by direct invocation. d) All of the above		

Q45.	DevOps means…
	A) Developers taking over all Operations tasks.
	B) Automating the process of software delivery and infrastructure changes.
	C) The collaboration and communication of both software developers and other information-technology (IT) professional while automating the process of software delivery and infrastructure changes.
	D) The collaboration and communication of just software developers and operations staff while automating the process software delivery and infrastructure changes.
	    a) A
	    b) B
	    c) C
	    d) D
		1.5	**CO1**

Q46.	Is this statement correct? "DevOps is more than just a tool or a process change, it inherently requires an organisational culture shift"
	A) Yes, there needs to be cultural shift within the organisation across all stakeholders to ensure a successful adoption of a DevOps approach.
	B) Yes, but the most up to date tools and LEAN processes need to be in place to drive an organisational culture shift.
	C) No, DevOps is all about the tools.
	D) No, cultural shift will occur when staff are using the most up to date tools and LEAN processes.
	    a) A
	    b) B
	    c) C
	    d) D
		1.5	**CO1**

Q47.	The adoption of DevOps is being driven by factors such as:
	A) Use of Agile and other development processes and methodologies
	B) Demand for an increased rate of production releases from application and business unit stakeholders
	C) Wide availability of virtualised and cloud infrastructure from internal and external providers
	D) Increased usage of data centre automation and configuration management tools
	Which factors are correct?
	    a) A, B and C only
	    b) B and C only
	    c) B, C and D only
	    d) All of the above
		1.5	**CO1**

Q48.	Which statement best describes the role of Change Management within a DevOps environment? A) Nothing changes as a risk adverse Change Management approach is paramount to IT and business success.	**1.5**	**CO4**

	B) The moment an app change is asked for, the request should go to the Developers to authorise. Once authorised it goes to Operations for implementation.
	C) The moment an app change is asked for, the request should go out to everyone on the team, no matter which IT discipline they work in.
	D) DevOps does not need Change Management?
	    a) A
	    b) B
	    c) C
	    d) D		

Q49.	Which statement best describes the relationship between DevOps and Continuous Delivery?
	A) DevOps and Continuous Delivery are the same thing.
	B) DevOps and Continuous Delivery are not related and are mutually exclusive.
	C) DevOps and Continuous Delivery share a background in Agile methods and LEAN thinking.
	D) DevOps and Continuous Delivery share common processes.
	    a) A
	    b) B
	    c) C
	    d) D
		1.5	**CO4**

Q50.	Which statement best describes the goal of DevOps?
	A) One goal of DevOps is to establish an environment where Change Management does bot control application releases.
	B) One goal of DevOps is to establish an environment where releasing more reliable applications faster and more frequently can occur.
	C) One goal of DevOps is to establish an environment where application development perform all operations tasks.
	D) One goal of DevOps is to establish an environment where releasing applications is valued over the quality of the released application.
	    a) A
	    b) B
	    c) C
	    d) D
		1.5	**CO4**

Q51.	Which benefits of adopting a DevOps approach could be included in a business case to adopt a DevOps approach?
	A) Improved deployment frequency, which can lead to faster time to market
	B) Lower failure rate of new releases
	C) Shortened lead time between fixes
	D) Development of completely error free software
	    a) A and C
	    b) B and C
	    c) A, B and C
	    d) All are correct
		1.5	**CO1**

Q52.	What does surefire plugin do in Apache maven?
	    a) Compile the app
	    b) Run test classes
		1.5	**CO4**

	c) Run the app d) Build the app		

Q53.	Agile and DevOps are similar but differ in a few important aspect.Which statement is correct?
	A) Agile is a change of thinking whereas DevOps is actual organisation cultural change
	B) Agile is actual organisational cultural change whereas DevOps is a change of thinking.
	C) Agile is process driven whereas DevOps is role driven.
	D) Agile is role driven whereas DevOps is process driven.
	    a) A
	    b) B
	    c) C
	    d) D
		1.5	**CO1**

Q54.	Is this statement correct? "DevOps is more than just a tool or a process change, it inherently requires an organisational culture shift"
	A) Yes, there needs to be cultural shift within the organisation across all stakeholders to ensure a successful adoption of a DevOps approach.
	B) Yes, but the most up to date tools and LEAN processes need to be in place to drive an organisational culture shift.
	C) No, DevOps is all about the tools.
	D) No, cultural shift will occur when staff are using the most up to date tools and LEAN processes.
	    a) A
	    b) B
	    c) C
	    d) D
		1.5	**CO1**

Q55.	The development teams that support the Agile approach to DevOps must include staff from the operations teams to ensure:
	A) That stability is prioritised over creativity
	B) Operational considerations are prioritised over stability
	C) Operational considerations are taken into account
	D) The resultant designs of the systems will fit nicely into the business as usual environment
	    a) A and B Only
	    b) B and C Only
	    c) C and D Only
	    d) D Only
		1.5	**CO1**

Q56.	Which benefits of adopting a DevOps approach could be included in a business case to adopt a DevOps approach? A) Improved deployment frequency, which can lead to faster time to market B) Lower failure rate of new releases C) Shortened lead time between fixes D) Faster mean time to recovery in the event of a new release crashing or otherwise disabling the current system a) A and C	**1.5**	**CO3**

	b) A,B and C c) A, B and C but not D d) all are correct		

Q57.	How do you check the state of your local git repository since your last commit?
	  a) git diff
	  b) git check
	  c) git status
	  d) git commit
		1.5	**CO1**

Q58.	Now, imagine that you have a local repository, but other team members have pushed changes into the remote repository. What best suitable Git operation would you use to download those changes into your working copy?
	  a) Clone
	  b) Pull
	  c) Download
	  d) None
		1.5	**CO2**

Q59.	The Git clone command does which of the following?
	  a) Creates a working directory
	  b) Makes a local copy of the repository
	  c) Commits a new branch
	  d) a and b
		1.5	**CO2**

Q60.	True or False? In Git, if you want to make your local repository reflect changes that have been made in a remote (tracked) repository, you should run the pull command.
	  a) True
	  b) Flase
		1.5	**CO3**