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**SITE21**

**April - 2024**

**III B.Tech II Sem Regular Examinations**

**DevOps**

**Subject Code: 21CSCST6020**

**Time: 3 hours Max. Marks: 70**

**Instructions:**

1. **Answer one full question from each unit in Part-A. Each full question carries 14 marks**

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| **PART- A** | | | | | |
| 1 | a | Explain importance of Agile software development. | 2 | CO1 | [7M] |
|  | b | What is SDLC? Explain various phases involved in SDLC. | 1 | CO1 | [7M] |
| **OR** | | | | | |
| 2 | a | Write principles of Agile software development. | 1 | CO1 | [7M] |
|  | b | What advantages does SDLC offer an organization? Explain | 1 | CO1 | [7M] |
| 3 | a | Describe DevOps delivery pipeline. | 2 | CO2 | [7M] |
|  | b | What is need of DevOps? | 1 | CO2 | [7M] |
| **OR** | | | | | |
| 4 | a | Explain the three ways of underpinning principles from which the DevOps behaviors and patterns are derived. | 2 | CO2 | [7M] |
|  | b | Explain DevOps architecture | 2 | CO2 | [7M] |
| 5 | a | Explain various factors that influence DevOps Adoption. | 2 | CO3 | [7M] |
|  | b | What is the difference between Agile and DevOps? | 1 | CO3 | [7M] |
| **OR** | | | | | |
| 6 |  | Explain tool stack implementation in DevOps. | 2 | CO3 | [14M] |
| 7 | a | Explain about continuous deployment. | 2 | CO4 | [7M] |
|  | b | Explain metrics used to track CI and CD practices. | 2 | CO4 | [7M] |
| **OR** | | | | | |
| 8 | a | Write difference between continuous integration and continuous delivery. | 1 | CO4 | [7M] |
|  | b | What is Continuous Integration? Explain the benefits. | 1 | CO4 | [7M] |
| 9 | a | Describe key factors of DevOps maturity model | 2 | CO5 | [14M] |
| **OR** | | | | | |
| 10 | a | Describe the four key tenets of DevOps that all mature ecosystems need to be considered as a benchmark for assessing the maturity of DevOps practices. | 2 | CO5 | [14M] |

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