UPES
End Semester Examination, May 2023

Course: System Monitoring
Program: B.Tech CSE (DevOps)
Course Code: CSDV 3013

Semester: VI
Time   : 03 hrs.
Max. Marks: 100

Instructions: There are two Sections. Attempt all sections.

SECTION A
(5Qx4M=20Marks)

S. No.		Marks	CO
Q1.	Discuss the KPI required to maintain health of a system.	4M	CO1
Q2.	Differentiate between Continuous Monitoring vs Maintaining Discipline	4M	CO2
Q3.	Explain the term Synthetic Transaction Monitoring using examples.	4M	CO2
Q4.	Contrast between Agent based and Agentless Monitoring	4M	CO3
Q5.	Bring out the importance of Log Monitoring using examples.	4M	CO3

SECTION B
(4Qx10M= 40 Marks)

Q6.	Illustrate using a diagram keys factors which impact DevOps lifecycle.	10M	CO3
Q7.	Write a note on Early Problem Detection and its importance.	10M	CO4
Q8.	Using a diagram highlight the facts of continuous monitoring	10M	CO4
Q9.	Discuss the Proactive and Re-active approaches to Log Monitoring	10M	CO1

SECTION-C
(2Qx20M=40 Marks)

Q10.	A web server accepts HTTP requests and issues a response to each of them that takes a non-zero amount of time. The duration is dependent on the size of the request. Suppose the server accepts up to 15 simultaneous requests and that each request takes on average 200 ms to complete. Requests may come at different times and their duration may vary, but let's assume that the server can safely take 75 requests per second. Keeping the above scenario in mind explain the following metrics: Amount, Time Delay, Amount per Time.	20M	CO5
Q11.	Elaborate on the common timeseries patterns and also explain what each pattern indicates with the help of diagrams.	20M	CO2