

Birla Institute of Technology & Science, Pilani
Work Integrated Learning Programmes Division
First Semester 2022-2023

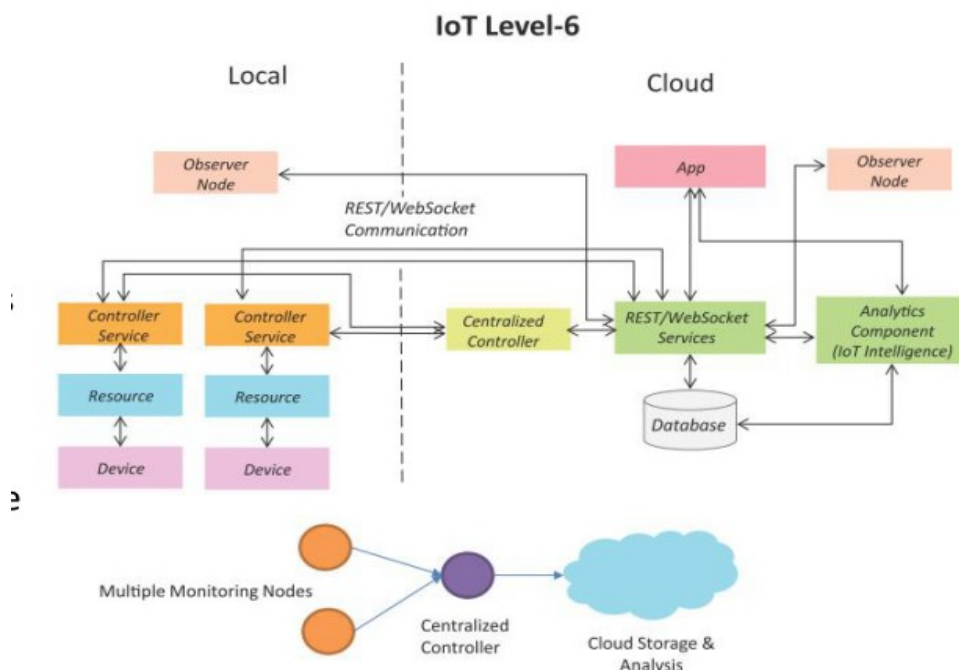
Comprehensive Examination
(EC-3 Regular)

Course No. : SE ZG586
 Course Title : Edge Computing
 Nature of Exam : Open Book
 Weightage : 40%
 Exam Slot : 27 November, 2022 (FN)

Important Instruction:

Students will be permitted to submit their answers to the exam questions for this exam only by typing in their answers for the questions in the Text box provided below every question. Students will not be permitted to submit their handwritten answers to the exam questions for this exam

Q1.	<p>Justify the need for the following components in this IoT level 6 architecture.</p> <ol style="list-style-type: none"> Controller Service Centralized Controller Observer Node Analysis Component Advantage of having REST/WebSocket communication 	[10 Marks]
Q2.	<p>You as a network engineer is tasked with analyzing the traditional network employed by the company before it switches to SDN. State and justify your analysis. Also state how SDN will be helpful?</p>	[4 Marks]
Q3	<p>What type of deployment view model is applicable in the following scenarios? Justify.</p> <ol style="list-style-type: none"> Smart street lamp system Video surveillance system 	[4 Marks]
Q4.	<p>Explain the following Data Analytics function:</p>	[2 Marks]



	<ul style="list-style-type: none"> i. Temporal events and patterns ii. Alerts iii. Trends iv. Joins 	
Q5.	<p>Justify with explanation: How does the following Edge Computing Node technologies add to the advantages of an Edge computing implementation?</p> <ul style="list-style-type: none"> i. Software Defined Network ii. Time Sensitive Network iii. Heterogeneous computing iv. Time Series Database 	[8 Marks]
Q6.	Explain the steps involved when we run "docker run -i -t ubuntu /bin/bash".	[4 Marks]
Q7.	Briefly explain the two important components of TensorFlow lite justifying the purpose.	[3 Marks]
Q8.	<p>How do the following DDos attack techniques unsecure the edge computing system?</p> <ul style="list-style-type: none"> a. ICMP flooding b. Slowloris 	[5 Marks]