

# Indian Institute of Information Technology Sri City, Chittoor

End Semester Examination – Nov-Dec 2021

Cloud Computing

SET - 1

Maximum Marks: 30

Time Duration: 1:30 Hours

Date: 29<sup>th</sup> Nov 2021

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## Instructions

1. This is a **closed book online proctored** exam.
    - a. You should not refer to books, notes or online resources.
    - b. You should not discuss questions or answers with anyone (including outsiders)
    - c. You should have your camera and microphone **ON** at all times and no headphones
  2. Write the solutions clearly and legibly in A4 sheets, using pen (NOT pencil) and at the end of the exam you should submit the scanned copy of your solutions as explained by the faculty
  3. **The name of the scanned copy should be Roll No + '\_' + Set No.pdf (e.g. S20190010XYZ\_Set1.pdf).**
  4. **Write your name, roll no. and set number on each page of the answer sheets.**
  5. **Answer questions in brief and to the point only.**
  6. Follow all other instructions given by the faculty during the exam.
  7. The exam is for 30 marks, and you will be given 1:30 hours from 8:30 AM to 10:00 AM for writing. After 10:00 AM, you are supposed to scan the answer sheet as a single PDF file and upload it before 10:15 AM without fail
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## Descriptive Questions (6 marks each)

1. Compare and contrast between the block cipher and stream cipher encryption techniques. Explain the working principle of each technique with neat block diagram.  
[3+3 Marks]
2. Define CIA in terms of cloud security. Discuss how would you ensure confidentiality, integrity and availability in a cloud environment.  
[3+3 Marks]
3. Explain in detail with neat diagram how confidentiality and authentication can be achieved using asymmetric encryption.  
[3+3 Marks]
4. Describe the 7Vs of Big Data with suitable example. Differentiate between the Structured, Un-structured, and Semi-structured data.  
[3+3 Marks]
5. What do you understand about the DDoS attacks? Briefly explain all the steps how DDoS attack is launched in a cloud computing environment, by a neat diagram. Also discuss the **prevention** techniques to defend against such attacks.  
[2+2+2 Marks]

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