SUBJECT: **Cloud Computing**   CODE: **CS 6218**

FULL MARKS: 20+10   Duration of Examination: **2 Hours**

22nd October 2021(Friday) 3-5PM

[Answer any five from the following]

All question should be answered by own hand writing and uploaded to MS team

[Start time 3.00PM, Finish time 4.30PM, Upload on or before 4.45PM]
[Quiz Start Time-4.50PM, Close Time 5.20PM]

[01]   Describe a cloud ecosystem with a diagram. What is the role of Data Centre in Cloud service? What is the role of internet in cloud computing?

[02]   What is a Cloud infrastructure? How does cloud infrastructure work? Differentiate between cloud infrastructure and cloud architecture.

[03]   Companies are increasingly aware of the business value that cloud computing brings and are taking steps towards transition to the cloud. What are the major challenges faced by cloud computing?

[04]   Outline the responsibility between a cloud user and the cloud service provider in the context of IaaS, PaaS and SaaS. What are the rights and responsibilities are suggested for consumers of Cloud Computing services as per the Gartner Global IT Council report?

[05]   Explain the structure of the three popular delivery models of the Cloud Service. What is the difference between traditional service delivery model and cloud service delivery model?

[06]   What is a private cloud? Cloud consumers need flexible infrastructure on demand. How the business objectives are realized with the help of cloud ecosystem?

[07]   What is the cloud computing delivery model? Explain the role of various entities in a Cloud computing delivery model.

[08]   What is Elasticity is Cloud Infrastructures? What is the difference between scalability and elasticity? Explain the traditional scale-out approach; a cloud architect can take to scale their applications to meet the demand.

[09] What is vendor lock-in in cloud computing? Why is vendor lock-in a concern? Suggest the tips to avoid the risks of vendor lock-in?

[10] A university debating whether to install a private cloud or to use a public cloud, e.g., the AWS or Azure, for its computational and storage needs, asks your advice. What information will you require to base your recommendation on, and how will you use each one of the following items: (a) the description of the algorithms and the type of the applications the organization will run; (b) the system software used by these applications; (c) the resources needed by each application; (d) the size of the user population; (e) the relative experience of the user population; (d) the costs involved.

What will be your advice and why? Should software licensing be an important element of the decision?

---------------------**Submit your answer on or before 4.45PM**-----------------

Instruction:

- The examination is hand written close book examination, followed by a Quiz test [MCQ].
- The examination will be in two part [20+10] marks], Assignments will be available with MS team (code **31pnxml**)
- Write your Name and Roll number clearly in top of your answer sheet.
- You have to upload the scan copy of your hand written answer sheet (pdf format only) in MS team (appropriate assignment) on or before **4.45PM.**

- Rename your submission file as Rollno_CC; the student with roll no 117CS0246 has to rename the answer file for the Question as **117CS0246_CC**.
- Call me on 9937324437 or 9337938766 for any assistance during the examination. My E-mail id is bdsahu@nitrkl.ac.in, bibhudatta.sahoo@gmail.com.

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