

Reg. No. :

Question Paper Code : 21059

B.E./B.Tech. DEGREE EXAMINATIONS, APRIL/MAY 2022.

Fifth/Seventh Semester

Aeronautical Engineering

OIT 552 – CLOUD COMPUTING

(Common : Aerospace Engineering/Agricultural Engineering/Automobile Engineering/Biomedical Engineering/Electrical and Electronics Engineering/Electronics and Communication Engineering/Electronics and Instrumentation Engineering/Electronics and Telecommunication Engineering/Geoinformatics Engineering/Industrial Engineering/Industrial Engineering and Management/Instrumentation and Control Engineering/Manufacturing Engineering/Marine Engineering/Material Science and Engineering/Mechanical Engineering/Mechanical Engineering (sandwich)/Mechanical and Automation Engineering/Mechatronics Engineering/Medical Electronics/Petrochemical Engineering/Production Engineering/Robotics and Automation/Bio Technology/Chemical Engineering/Chemical and Electrochemical Engineering/Food Technology/Petrochemical Technology/Petroleum Engineering/Pharmaceutical Technology)

(Regulations 2017)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Draw the convergence of various technologies that lead to the growth of cloud computing.
2. List few public cloud applicable for use.
3. Define load balancing.
4. What is para-virtualization? Give example.
5. State the use of Hybrid cloud with an example.
6. Identify different cloud storage services available in real time.
7. Show the stack of six layers of cloud services.
8. Differentiate between DoS and DDoS.
9. What is the use of Hadoop.
10. How VM image is managed in Eucalyptus?

PART B — (5 × 13 = 65 marks)

11. (a) (i) Explain the desired features of cloud computing. (6)
(ii) Write down the pros and cons of cloud computing.

Or

- (b) Discuss the challenges and risks involved in cloud computing. (7)

12. (a) Describe about different types of virtualization.

Or

- (b) Explain the seven layers of virtualization with a neat sketch.

13. (a) Illustrate different cloud service models with a neat diagram.

Or

- (b) What are the different architectural design challenges in the cloud environment? Explain them.

14. (a) Write short notes on Resource provisioning and Platform deployment in cloud.

Or

- (b) Explain data protection techniques in cloud environment.

15. (a) Draw the architecture of GAE and explain it.

Or

- (b) Describe about, (i) open stack (ii) open Nebula

PART C — (1 × 15 = 15 marks)

16. (a) Consider two cloud service systems : Google File System and Amazon S3. Compare their design goals to secure data integrity and to maintain data consistency during failures.

Or

- (b) Assume the process of creating a data center with physical and cyber security protection. Elaborate the concepts to be taken in detail.