HILL UNIVERSITY
Established by an Act of the State Legislature of Uttarakhand (Adhiniyam Sankhya 12 of 2011)
University under Section 2(f) of UGC Act, 1956

Term Evaluation (Odd) Semester Examination September 2025

Roll no...............................

Name of the Course: B.Tech CSE
Semester: 5
Name of the Paper: *Cloud-based Application Development and Management*
Paper Code: TCS 552
Time: 1.5 hours   **Maximum Marks: 50**

Note:
  (i)   Answer all the questions by choosing any one of the sub-questions
  (ii) Each question carries 10 marks.

Q1.   (10 Marks)
a. Analyse the importance of Service Level Agreements (SLAs) in cloud computing and discuss their impact on service reliability and customer trust. Discuss the SLA lifecycle with a typical diagram. (CO4,1)

OR

b. Examine the architectural components of a modern cloud data center and evaluate their role in enabling scalable and reliable services. (CO1)

Q2.   (10 Marks)

a. Critically evaluate the impact of cloud adoption on enterprise IT governance, cost optimisation, and innovation.(CO1)

OR

b. Outline the compute services of AWS and evaluate their suitability for large-scale enterprise applications. (CO5)

Q3.   (10 Marks)
a. Examine the architecture of Google App Engine and analyse its application life cycle with reference to real-world scenarios. (CO2)

OR

b. Compare and contrast AWS, Microsoft Azure, and Google Cloud in terms of compute, storage, and pricing strategies. (CO3)

Q4.   (10 Marks)
a. Explain how virtualisation enables efficient resource utilization in cloud environments. (CO3,4)

OR

b. Compare and Contrast Type-1 and Type-2 Hypervisors. Explain by giving typical block diagrams

Q5   (10 Marks)
a. Differentiate SQL Azure from traditional relational databases, highlighting advantages and limitations. (CO5)

OR

b. Outline the Storage and Communication services of AWS and evaluate their suitability for enterprise applications. (CO5)