

(FOR THE CANDIDATES ADMITTED

SUBJECT CODE

20 UCT 5E1

DURING THE ACADEMIC YEAR 2020-21 ONLY)

REG.NO.

**N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI**

**END-OF-SEMESTER EXAMINATIONS : DECEMBER – 2022**

**B.Sc. – COMPUTER TECHNOLOGY**

**MAXIMUM MARKS: 70**

**V SEMESTER**

**TIME : 3 HOURS**

**PART - III**

**CLOUD COMPUTING**

**SECTION – A**

**(10 X 1 = 10 MARKS)**

**ANSWER THE FOLLOWING QUESTIONS.**

**MULTIPLE CHOICE QUESTIONS.**

**(K1)**

1. The term 'Cloud' in cloud-computing refers to \_\_\_\_\_.
  - a) cumulus clouds
  - b) thin clients
  - c) a computer
  - d) the internet
2. Which one of the following is a phase of the Deployment process?
  - a) Selecting Cloud Computing Provider
  - b) IT Architecture Development
  - c) Business Architecture Development
  - d) Transformation Plan Development
3. Which of the following is not a characteristic of application workload?
  - a) Session
  - b) Inter-Session Interval
  - c) Workload Mix
  - d) Session distribution
4. What is the term for restricting users so that they can only access the features they are assigned?
  - a) Authorization
  - b) Authentication
  - c) Administration
  - d) Accounting
5. Amazon Web Services is which type of cloud computing distribution model?
  - a) Platform as a Service
  - b) Software as a Service
  - c) Infrastructure as a Service
  - d) Back-end as a Service

**ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES.**

**(K2)**

6. List any two examples of PaaS (Platform as a Service).
7. What is the function of Hadoop NameNode?
8. Give reasons why benchmarking of cloud applications is important.
9. What is SSO?
10. Which is Python web application framework? What does it do?

**SECTION – B** **(5 X 4 = 20 MARKS)**  
**ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.**  
**(K3)**

11. a) List out and discuss the essential characteristics of cloud computing.  
**(OR)**  
b) Highlight pros and cons of few commonly used load balancing algorithms.
12. a) What is open source private cloud? List few open source cloud computing platforms.  
**(OR)**  
b) Describe the components of Hadoop cluster with a neat diagram.
13. a) Enlist the key elements to be considered while designing cloud applications.  
**(OR)**  
b) Distinguish between SQL and No-SQL.
14. a) Explain the key security challenges for cloud applications.  
**(OR)**  
b) Elaborate the impact of cloud computing in teaching and learning process.
15. a) Demonstrate how to create a MapReduce job in Python and run it on a Hadoop cluster.  
**(OR)**  
b) Enlist and explain few Python packages and their uses.

**SECTION - C** **(4 X 10 = 40 MARKS)**  
**ANSWER ANY FOUR OUT OF SIX QUESTIONS**  
**(16<sup>th</sup> QUESTION IS COMPULSORY AND ANSWER ANY THREE**  
**QUESTIONS FROM Qn. No: 17 to 21)** **(K4 / K5)**

16. Analyze the different cloud models with examples.
17. Elucidate the enabling technologies of cloud computing with necessary diagrams.
18. Classify common cloud service and their associated layers in the cloud reference model with suitable examples and explanation.
19. Explain the cloud application design methodologies in detail.
20. Describe the CSA Cloud Security Architecture with a neat diagram.
21. Compare Amazon Web Services (AWS) and Microsoft Azure services to Google Cloud.