**MALLA REDDY ENGINEERING COLLEGE FOR WOMEN**
**Autonomous Institution-UGC, Govt. of India**
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**National Ranking by NIRF Innovation-Rank band(20-300),MHRD,Govt. of India**
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| DEPARTMENT: CSE - DS | COURSE: III B.TECH II SEM | SUBJECT: CC |
|---|---|---|
| | R22 REGULATION | 2025-2026 |

# ASSIGNMENT SHEET-1

## SET-1

| Sno | Question | CO | PO | BTL |
|---|---|---|---|---|
| 1 | Differentiate between **Distributed Computing** and **Parallel Computing**. | CO1 | PO1 | 4 |
| 2 | Explain **High-Performance Computing** with architecture and applications. | CO1 | PO1 | 2 |
| 3 | Describe the **five essential characteristics of Cloud Computing** in detail. | CO2 | PO1 | 2 |
| 4 | Explain the **four cloud deployment models** with suitable use cases. | CO2 | PO2 | 3 |
| 5 | Explain **Network Connectivity in Cloud Computing**. | CO3 | PO1 | 2 |

## SET-2

| Sno | Question | CO | PO | BTL |
|---|---|---|---|---|
| 1 | Explain the **four cloud deployment models** with suitable use cases. | CO2 | PO2 | 3 |
| 2 | Compare **traditional computing** and **cloud computing**. | CO2 | PO1 | 4 |
| 3 | Explain **Cluster Computing** and **Grid Computing**. Highlight their differences. | CO1 | PO1 | 4 |
| 4 | Describe **Optical Computing** and **Nano Computing** with potential applications. | CO1 | PO1 | 2 |

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|---|---|---|---|---|
| 5 | Access a simple blog application using the MVC architecture. Describe how you would separate the Model, View, and Controller in this context. | CO3 | PO3 | 3 |

## SET-3

| Sno | Question | CO | PO | BTL |
|---|---|---|---|---|
| 1 | Compare **cluster computing** and **grid computing** in terms of scalability. | CO1 | PO2 | 4 |
| 2 | Analyze the differences between **HPC and Cloud Computing**. | CO1 | PO1 | 4 |
| 3 | Explain **public, private, community, and hybrid cloud models**. | CO2 | PO1 | 2 |
| 4 | A startup wants to deploy a web application with minimum cost. Which cloud model and service would you recommend? Justify. | CO2 | PO2 | 5 |
| 5 | Describe the deployment of a **three-tier web application** in the cloud. | CO3 | PO3 | 3 |

## SET-4

| Sno | Question | CO | PO | BTL |
|---|---|---|---|---|
| 1 | Explain why **quantum computing** is not yet widely commercialized. | CO1 | PO1 | 5 |
| 2 | Analyze the impact of **nano computing** on future hardware design. | CO1 | PO2 | 4 |
| 3 | Explain how cloud computing supports **big data analytics**. | CO2 | PO1 | 3 |
| 4 | Analyze the role of cloud computing in **e-governance**. | CO2 | PO2 | 4 |
| 5 | How does cloud management ensure **performance optimization**? | CO3 | PO3 | 3 |

## SET-5

| Sno | Question | CO | PO | BTL |
|---|---|---|---|---|
| 1 | Why is **bio computing** suitable for complex biological problems? | CO1 | PO1 | 4 |
| 2 | How does mobile computing support **real-time applications**? | CO1 | PO1 | 3 |
| 3 | Discuss the **motivating factors** for cloud adoption. | CO2 | PO2 | 4 |
| 4 | Describe the **benefits and risks of cloud computing**. | CO2 | PO2 | 4 |
| 5 | Explain the use of **containers VS virtual machines**. | CO3 | PO1, PO3 | 4 |

**SET-6**

| Sno | Question | CO | PO | BTL |
|---|---|---|---|---|
| 1 | Explain why **quantum computing** is not yet widely commercialized. | CO1 | PO1 | 5 |
| 2 | Discuss the role of **network latency** in distributed systems. | CO1 | PO2 | 4 |
| 3 | Analyze the role of cloud computing in **e-governance**. | CO2 | PO2 | 4 |
| 4 | How does **elasticity** help in handling peak workloads? | CO2 | PO1 | 3 |
| 5 | Explain how **load balancing and auto-scaling** work together. | CO3 | PO3 | 3 |

Signature of Faculty: Signature of HOD: