

MSc(SS) DEGREE EXAMINATION MAY 2026
(Eighth Semester)

Branch – **SOFTWARE SYSTEMS (Five Year integrated)**

CLOUD COMPUTING AND DEVOPS

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** marks

(5 x 1 = 5)

- 1 Where are the components located in distributed computing?
(i) In a single system (ii) On different networked computers
(iii) Only in cloud (iv) Inside a cluster only
- 2 Which of the following is a cloud deployment model?
(i) Centralized Cloud (ii) Static Cloud
(iii) Public Cloud (iv) Local Cloud
- 3 Which company introduced MapReduce?
(i) Google (ii) Amazon
(iii) IBM (iv) Microsoft
- 4 Find the main goal of DevOps is to:
(i) Increase Documentation (ii) Improve collaboration between teams
(iii) Replace Developers (iv) Reduce Hardware Cost
- 5 Choose the main purpose of Jenkins.
(i) Network Routing (ii) Database Management
(iii) File Compression (iv) Continuous integration

SECTION - B (15 Marks)

Answer **ALL** Questions

ALL Questions Carry **EQUAL** Marks

(5 x 3 = 15)

- 6 a Explain the architecture of Distributed Computing.
OR
b Discuss the advantages and disadvantages of Cluster Computing.
- 7 a Illustrate the difference between cloud computing and grid computing.
OR
b Classify the different types of Virtualization.
- 8 a Explain the architecture of GFS.
OR
b Discuss Amazon EC3 and S3 Storage in cloud computing framework.
- 9 a Justify DevOps and explain its main objectives.
OR
b State any Three differences between the Waterfall model and the Agile model.
- 10 a Explain Docker briefly.
OR
b Illustrate Puppet as a Configuration Management tool.

Cont...

SECTION -C (30 Marks)Answer **ALL** questions**ALL** questions carry **EQUAL** Marks

(5 x 6 = 30)

- 11 a Compare SOA and web services in a distributed computing environment.
OR
b Justify the need for cluster computing with its architecture and applications.
- 12 a Elucidate Cloud Computing, highlighting its characteristics and evolution.
Justify the pros and cons of cloud computing.
OR
b. Analyze the architecture of VMM and discuss its importance in cloud computing.
- 13 a Enumerate the architecture of HDFS and explain its components in detail.
OR
b Criticize the Aneka framework and examine its role in cloud computing
- 14 a Analyze the role of DevOps in cloud computing environments.
OR
b Evaluate DevOps and its integration with SDLC models.
- 15 a Elucidate Continuous Integration and Deployment using Jenkins.
OR
b Compare configuration management tools – Ansible, Puppet, and Chef in detail.

Z-Z-Z

END