**MSC-11** 

# M.Sc. (CS) DEGREE EXAMINATION – DECEMBER, 2018.

### Second Year

### DISTRIBUTED SYSTEM

Time: 3 hours Maximum marks: 75

PART A —  $(5 \times 5 = 25 \text{ marks})$ 

- 1. Write short notes on e-mail server.
- 2. Discuss briefly about Interconnection structures.
- 3. Explain the characteristics of Distributed systems.
- 4. Write short notes on Heterogeneous distributed database.
- 5. Briefly explain features of distributed database.
- 6. Discuss about database decision trees.
- 7. List the level of transparency.

- 8. Explain Distributed database in detail.
- 9. Explain about issues in distributed design.
- 10. Explain the concept of file server in detail.
- 11. Explain in detail about client/server network.
- 12. Explain process load distribution in detail
- 13. Explain the distribution transparency in detail.
- 14. Explain problems of heterogeneous database in detail.

# M.Sc. DEGREE EXAMINATION — DECEMBER 2018.

## Second Year

### ADVANCED WEB PROGRAMMING

Time: 3 hours Maximum marks: 75

PART A —  $(5 \times 5 = 25 \text{ marks})$ 

- 1. Discuss the steps involved in JDBC connectivity.
- 2. What are Servlets? Explain the task involved in servlets.
- 3. Differentiate between AWT and Swing.
- 4. Explain images in Java swings.
- 5. Mention different types of JDBC.
- 6. Write short notes on Cookies.
- 7. Discuss about Web -server.

- 8. Explain in detail about multi tier applications.
- 9. Explain the lifecycle of applet.
- 10. Explain how to build an application using Java Beans.
- 11. List and explain the different types of Enterprise Beans.
- 12. Explain in detail about Remote Method Invocation.
- 13. What are the lifecycle phases of JSP?
- 14. What is JDBC driver? Explain the types of JDBC drivers in detail.

**MSC-13** 

# M.Sc. DEGREE EXAMINATION – DECEMBER, 2018.

## Second Year

## **OPERATING SYSTEM**

Time: 3 hours Maximum marks: 75

PART A —  $(5 \times 5 = 25 \text{ marks})$ 

- 1. Write the features of multiprocessor operating systems.
- 2. Give the basics concepts of process shortly.
- 3. What is scheduling?
- 4. Explain the working of swapping in memory management.
- 5. Outline the file system structure.
- 6. Pen down the importance of I/O hardware.
- 7. Write short notes on design principles of any one operating system.

- 8. Explain in detail about mainframe systems.
- 9. What are the system components that are part of operating system structures?
- 10. Describe the operations on processes.
- 11. Explain any one scheduling algorithm in example.
- 12. What is paging? Discuss.
- 13. Explore disk scheduling.
- 14. Discuss the importance of memory management in any one operating system.

# M.Sc. DEGREE EXAMINATION — DECEMBER 2018.

### Second Year

#### ARTIFICIAL INTELLIGENCE

Time: 3 hours Maximum marks: 75

PART A —  $(5 \times 5 = 25 \text{ marks})$ 

- 1. Write short note on Problem solving Agent architecture.
- 2. Explain about Embedded and simulated agents.
- 3. Write short note on Backtracking search for constraint satisfaction problems.
- 4. Write about Uninformed search strategies.
- 5. Write about backward chaining.
- 6. Explain about any one unsupervised learning classification technique.
- 7. Describe about Language models in AI.

- 8. Write an elaborate note on intelligent and problem solving agents.
- 9. Explain in detail about Alpha Beta Pruning.
- 10. Write about Knowledge Representation in AI.
- 11. Discuss about First order Predicate Logic in detail.
- 12. Write about Learning Decision trees in detail.
- 13. Describe about supervised learning classification with linear models.
- 14. Discuss about AI Planning.

# M.Sc. DEGREE EXAMINATION – DECEMBER, 2018.

## Second Year

## NETWORK SECURITY

Time: 3 hours Maximum marks: 75

PART A —  $(5 \times 5 = 25 \text{ marks})$ 

- 1. Write an elaborate note on OSI Security Architecture.
- 2. Discuss about Symmetric block encryption algorithms.
- 3. Write about Public-Key Encryption Structure.
- 4. Write about Kerberos authentication.
- 5. Explain about Secure socket Layer.
- 6. Discuss the basic concepts of SNMP Protocol.
- 7. Explain about Intrusion detection.

- 8. Write short note on Security Attacks.
- 9. Explain in detail about Public key Cryptography.
- 10. Write about
  - (a) Secure Hash Functions
  - (b) Message Authentication codes.
- 11. Discuss about IP Security Architecture.
- 12. Describe about Password Management with Markov model.
- 13. Discuss about Distributed Denial of Service Attacks.
- 14. What are different types of Firewalls and explain briefly.