Roll No.

Total No. of Pages: 02

Total No. of Questions: 09

B.Tech.(IT) (Sem.-6)

# MACHINE LEARNING

Subject Code: BTIT608-18

M.Code: 79627

Date of Examination: 06-05-2025

Time: 3 Hrs.

Max. Marks: 60

## INSTRUCTIONS TO CANDIDATES:

- SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- 2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
- 3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

# SECTION-A

# 1. Write briefly:

- a. Machine Learning
- b. Data Pre-Processing
- c. Feature Scaling
- d. Regression
- e. Mean Absolute Error
- f. Decision Tree
- g. Gini Index
- h. Data Reduction
- i. Scatter Plot
- j. Mutation.

## **SECTION - B**

- 2. Differentiate between supervised and unsupervised learning techniques.
- 3. Discuss the various data pre-processing methods. Give suitable examples.
- 4. Explain the various performance evaluation metrics for regression models.
- 5. How classification is different from clustering?
- 6.00 Give details of any two application areas where neural network is used.

## SECTION - C

- Discuss the advantages and disadvantages of support vector machine technique.
- 8. Describe any four application areas of Apriori algorithm.
- Differentiate between simple linear regression and multiple linear regressions.

Roll No.

Total No. of Pages: 02

Total No. of Questions: 09

B.Tech. (Information Technology) (Sem-6)

WEB TECHNOLOGIES

Subject Code: BTIT602-18

M.Code: 79624

Date of Examination: 03-05-2025

Time: 3 Hrs.

Max. Marks: 60

# INSTRUCTIONS TO CANDIDATES:

- SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- 2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
- 3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

#### SECTION-A

# 1. Write Briefly:

- a) Define Event. How events are handled in JavaScript.
- b) Define ordered list with an example.
- c) What are the protocols used by AJAX?
- d) Define image tag with an example.
- e) Differentiate between PHP and JavaScript.
- What is AJAX? Write advantages of AJAX.
- g) What is the use of a web server? Discuss.
- h) Explain in brief about HTTP.
- i) What are Meta tags? Give examples.
- j) How we can read and write JSON on client and server?

#### SECTION - B

- How you can create forms and tables using HTML. Discuss with examples.
- 3. Compare For, while and do while looping structures of Java Script.
- 4. What are the differences between Get and Post methods?
- 5. How you can handle dynamic HTML with AJAX? Discuss.
- 6. What are the data types supported by PHP.

## au S- NOITO- Care sach and students

- 7. Define Frameset, Frame Tag. Divide the web page into four equal parts each individual part displays different web page.
- 8. What do you mean by HTML? Explain the classification of HTML tags with examples. Differentiate between HTML and DHTML.
- 9. What is DOM? Draw the detailed DOM objects structure. Explain its usage.

Roll No.				

Total No. of Pages: 02

Total No. of Questions: 09

B.Tech. (IT) (Sem.-6)
CLOUD COMPUTING

Subject Code: BTIT613-18

M.Code: 79632

Date of Examination: 20-05-2025

Time: 3 Hrs.

Max. Marks: 60

#### INSTRUCTIONS TO CANDIDATES:

- SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- 2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
- 3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

# **SECTION-A**

# 1. Write briefly:

- a) Cloud Computing
- b) Virtualization
- c) PaaS
- d) Hypervisors
- e) Scalability
- f) SaaS
- g) Public cloud
- h) Community cloud
- i) Service hijacking
- i) Web services

## **SECTION - B**

- Explain the characteristics of cloud computing.
- 3. Differentiate between types of hypervisors.
- Discuss the applications of cloud computing.
- 5. Describe the process of cloud deployment models.
- 6. State the pros and cons of virtualization technology.

## **SECTION - C**

- 7. Explain in detail the architecture of Infrastructure as a Service.
- 8. Discuss types of workload patterns for the cloud and grid with utility computing.
- 9. Describe principal security dangers to cloud computing. Also, compare existing cloud platforms.

Roll No.

Total No. of Pages: 02

Total No. of Questions: 09

# B.Tech. (IT)(Sem.-6) AGILE SOFTWARE DEVELOPMENT

Subject Code :BTIT609-18 M.Code :79628

Date of Examination: 03-06-2025

Time: 3 Hrs.

Max. Marks: 60

# INSTRUCTIONS TO CANDIDATES :

SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.

2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.

3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

# **SECTION-A**

# 1. Answerbriefly:

- a) Define agile software development in simple terms.
- b) List any four principles of Agile Manifesto and explain their significance.
- c) What are the key challenges in Agile adoption within organizations?
- d) What are the core values of Extreme Programming?
- e) Describe the role of an XP team in agile development.
- f) What is the significance of a Daily Scrum meeting?
- g) Explain the concept of Work-in-Progress Limits in Kanban.
- h) What are Kanban Cards? How do they improve workflow management?
- i) What is the difference between Acceptance Testing and Unit Testing in Agile?
- j) What is Continuous Integration? How does it help in agile software development?

# **SECTION-B**

- Discuss the benefits of Agile in software development. How does Agile improve productivity, qualityand customer satisfaction?
- 3. What are User Stories in Scrum? Explain their importance, structure, and best practices for writing them.
- 4. How does Kanban differ from Scrum? Compare their methodologies, benefits, and ideal use cases.
  - 5. Explain the importance of Agile Testing and its impact on software quality. How doesit differ from traditional testing approaches?
- Explain the concepts of Code Refactoring and Regression Testing in Agile development with the help of suitable examples.

#### **SECTION-C**

- 7. Describe the history of Agile development. Explain the five design principles of Agilewith real-world software examples.
- 8. Explain the Scrum framework in detail, covering its roles, eventsand artifacts.
- 9. Discuss Pair Programming in Extreme Programming. What are its advantages and potential challenges in an Agile environment?