

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)

M.Tech I Year II Semester Supplementary Examinations April-2026

MACHINE LEARNING

(Computer Science & Engineering)

Time: 3 Hours

Max. Marks: 60

(Answer all Five Units 5 x 12 = 60 Marks)

UNIT-I

1 Describe distance-based methods with a detailed explanation. CO1 L2 12M

OR

2 a Explain Linear Regression in supervised learning. CO1 L2 6M

b Describe about Logistic Regression in supervised learning. CO1 L2 6M

UNIT-II

3 a Define clustering and explain the different types of clustering techniques in detail. CO2 L2 6M

b Explain about Generative Models in Unsupervised Learning. CO2 L2 6M

OR

4 a How Matrix factorization works in PCA. Explain in detail. CO2 L2 6M

b Explain PCA and its process with their applications. CO2 L2 6M

UNIT-III

5 a Explain evaluation techniques for machine learning models and demonstrate how model selection is performed. CO3 L3 6M

b Define statistical theory how it is performed in machine learning. CO3 L2 6M

OR

6 What is Random forest? Explain with example. CO4 L2 12M

UNIT-IV

7 a What is Sparse Modelling? Explain its functions? CO5 L2 6M

b Illustrate about Semi supervised learning. CO5 L3 6M

OR

8 Discuss scalable Machine learning with distributed & online. CO5 L2 12M

UNIT-V

9 a Compile the recent trends in various learning techniques of machine learning. CO6 L6 6M

b Give a detail note on Classification methods for IOT with neat sketch. CO6 L2 6M

OR

10 Explain the various models for IOT applications discuss with example. CO6 L2 12M

*** END ***

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M.Tech I Year II Semester Supplementary Examinations April-2026

HUMAN COMPUTER INTERACTION

(Computer Science & Engineering)

Time: 3 Hours

Max. Marks: 60

(Answer all Five Units 5 x 12 = 60 Marks)

UNIT-I

1 a Explain the importance of I/O channels and Memory in HCI with examples? CO1 L2 6M

b Explain the importance of Devices and Memory in a computer of HCI? CO1 L2 6M

OR

2 a Explain the Principles of user interface design. CO1 L2 6M

b Write a short note on the usability assessment in the design process. CO1 L3 6M

UNIT-II

3 a Discuss about human interaction speeds. CO2 L3 6M

b What is meant by basic business function? Explain with example. CO2 L2 6M

OR

4 a Explain in detail about the important human characteristics in design. CO2 L2 6M

b Explain briefly about how to distract the screen user. CO2 L2 6M

UNIT-III

5 a What are Window characteristics? CO3 L1 6M

b How to format on Menus? Explain. CO3 L2 6M

OR

6 a What are the Window operations? Explain. CO3 L2 6M

b Explain about the components of a Window. CO3 L3 6M

UNIT-IV

7 a Explain in detail about Platforms in Mobile Ecosystem with suitable Examples. CO4 L4 6M

b Briefly Explain about Application frameworks with examples. CO4 L4 6M

OR

8 a Briefly explain about Mobile 2.0 and Mobile Design part of Mobile 2.0. CO4 L3 6M

b Discuss about Elements of Mobile Design. CO4 L2 6M

UNIT-V

9 a How to select the device based controls. Explain in detail. CO5 L4 6M

b What are Operable controls? Give example. CO5 L3 6M

OR

10 a Discuss about components of Multimedia. CO5 L3 6M

b Explain in detail about choosing colours. CO5 L2 6M

*** END ***

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
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M.Tech I Year II Semester Supplementary Examinations April-2026

CYBER SECURITY

(Computer Science & Engineering)

Time: 3 Hours

Max. Marks: 60

(Answer all Five Units 5 x 12 = 60 Marks)

UNIT-I

- 1 Discuss and Elaborate about Cybercrime and its related security measures. CO1 L2 12M

OR

- 2 Identify Cybercrimes Cases of Various Categories under ITA 2000. CO1 L3 12M

UNIT-II

- 3 a Discuss the various tools used in cybercrime. CO2 L2 6M
b Classify different techniques used in cybercrime. CO2 L4 6M

OR

- 4 Define Password Cracking? Explain the tools in password cracking. CO1 L2 12M

UNIT-III

- 5 Explain the steps in Cyber Forensic analysis of e-mail in detail. CO3 L1 12M

OR

- 6 Explain about Digital Forensics life cycle in detail. CO3 L2 12M

UNIT-IV

- 7 a Compare Mobile Computing Vs Wireless Computing. CO5 L2 6M
b Distinguish Malwares, viruses and worms. CO5 L4 6M

OR

- 8 a Discuss the attacks on mobile or cell phones. CO5 L2 6M
b Compare Mishing, Smishing and Vishing in detail. CO5 L2 6M

UNIT-V

- 9 Explain in detail about organizational implications. CO6 L2 12M

OR

- 10 Prioritize the theme behind the "Social media marketing tools". CO6 L4 12M

*** END ***

O.P.Code: 20CS5006

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H.T.No.

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)
M.Tech I Year II Semester Supplementary Examinations April-2026
SOFT COMPUTING
(CSE)

Time: 3 Hours**Max. Marks: 60**

(Answer all Five Units 5 x 12 = 60 Marks)

UNIT-I

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|---|---|-----|----|----|
| 1 | a Compare Conventional AI and Computational Intelligence. | CO1 | L4 | 6M |
| | b Discuss about Machine Learning basics. | CO1 | L2 | 6M |

OR

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|---|---|-----|----|-----|
| 2 | List out various characteristics of soft computing and explain in detail. | CO1 | L2 | 12M |
|---|---|-----|----|-----|

UNIT-II

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|---|---|-----|----|----|
| 3 | a Differentiate classical and fuzzy sets. | CO2 | L2 | 6M |
| | b Describe the properties of fuzzy sets. | CO2 | L4 | 6M |

OR

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|---|--|-----|----|-----|
| 4 | Analyse the Fuzzy Inference Systems with neat diagram. | CO2 | L6 | 12M |
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UNIT-III

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|---|--|-----|----|----|
| 5 | a What are the limitations of "Perceptron" model? Explain. | CO3 | L2 | 6M |
| | b Analyze Exclusive-OR problem in Perceptron model. | CO3 | L4 | 6M |

OR

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|---|---|-----|----|-----|
| 6 | Explain the Radial Basis Function(RBF) with simple example. | CO3 | L2 | 12M |
|---|---|-----|----|-----|

UNIT-IV

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|---|--|-----|----|-----|
| 7 | Discuss about Simple genetic algorithm with neat sketch. | CO4 | L2 | 12M |
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OR

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|---|---|-----|----|----|
| 8 | a Explain different cross over operations performed in GA. | CO4 | L2 | 6M |
| | b Differentiate genetic algorithm versus traditional algorithm. | CO4 | L2 | 6M |

UNIT-V

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|---|--|-----|----|-----|
| 9 | Summarize the various classifiers involved in the implementation of Neural networks. | CO5 | L2 | 12M |
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OR

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| 10 | Explain the basic features of MATLAB in detail. | CO5 | L2 | 12M |
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