

Code: 20ES1601

III B.Tech - II Semester – Regular Examinations – JUNE 2023

**AI TOOLS
(CIVIL ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

Note: 1. This paper contains questions from 5 units of Syllabus. Each unit carries 14 marks and have an internal choice of Questions.

2. All parts of Question must be answered in one place.

BL – Blooms Level

CO – Course Outcome

			BL	CO	Max. Marks
UNIT-I					
1		Describe the goals of AI? Identify and explain any five real-world applications of AI in various fields.	L2	CO1	14 M
OR					
2		Summarize the definition of AI in the context of i. Thinking Humanly ii. Acting Humanly iii. Thinking Rationally iv. Acting Rationally	L2	CO1	14 M
UNIT-II					
3	a)	Discuss about the concept of regression in Machine Learning?	L2	CO1	4 M
	b)	Show how a supervised machine learning algorithm handles a regression task using a suitable example.	L3	CO2	10 M

OR					
4	a)	Explain clustering in Machine Learning?	L2	CO1	4 M
	b)	Solve an example and demonstrate how a clustering algorithm is used to discover clusters in data.	L3	CO2	10 M
UNIT-III					
5		Explain a real-world example and illuminate the significance of machine learning algorithms in decision making processes.	L4	CO4	14 M
OR					
6		Explain and infer the significance of image pre-processing when performing computer vision tasks with machine learning algorithms	L4	CO4	14 M
UNIT-IV					
7		Demonstrate the functionalities and analyze the importance of the various types of layers found in a Convolutional neural network architecture.	L3	CO3	14 M
OR					
8		Illustrate Deep Learning and how does it works?	L3	CO3	14 M
UNIT-V					
9	a)	Discuss about Natural Language Processing in Deep Learning.	L2	CO1	4 M
	b)	Illustrate the application of Deep Learning algorithms in Natural Language Processing with a suitable example.	L3	CO3	10 M
OR					

10	Demonstrate the application of Deep Learning algorithms in Speech Recognition with a suitable example.	L3	CO3	14 M
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