TED (21) – 5133C
(REVISION – 2021)

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Reg.No……
Signature…….

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE, NOVEMBER – 2024

FUNDAMENTALS OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

[Maximum Marks:75] [Time: 3 Hours]

PART - A

I. Answer all the following questions in one word or one sentence. Each question Carries 'one' marks.

(9 x 1 = 9 Marks)

		Module Outcome	Cognitive level
1	Define Artificial Intelligence	M1.01	R
2	……learning in which labeled training data is used.	M1.02	R
3	The type() function can be used to get the data type of any object (True/False)	M2.02	R
4	Python Dictionary is used to store the data in a …….format.	M2.03	R
5	List the types of supervised Learning algorithm	M3.01	R
6	Full form of SVM is…….	M3.03	R
7	K-Means algorithm is a ……learning algorithm	M3.03	R
8	Game bot logic that uses the……. Learning.	M4.01	R
9	……algorithm is used in tic tac toe game	M4.05	R

PART - B

II. Answer *any eight* questions from the following. Each question carries 'Three' marks.

(8 x 3 = 24 Marks)

		Module Outcome	Cognitive level
1	Explain the necessity of learning Artificial intelligence.	M1.01	U
2	Summarize various artificial intelligence tools	M1.04	U
3	Write a python program to find largest of two numbers.	M2.02	A
4	Explain List in python with example.	M2.03	U
5	Explain exception handling in python	M2.04	U
6	Outline Classification in machine learning.	M3.02	U
7	Explain K nearest neighbour(KNN) algorithm	M3.03	U
8	Summarize random forest classification algorithm	M3.05	U
9	Outline Combinatorial Search in artificial intelligence	M4.02	U
10	Explain tic tac toe game	M4.03	U

PART - C

Answer all the questions from the following. Each question carries 'seven' marks.

(6 x 7 = 42 Marks)

		Module Outcome	Cognitive level
III.	Summarize different types of learning in artificial intelligence.	M1.02	U
	OR		
IV.	Outline different fields of artificial intelligence.	M1.03	U
V.	Explain Python functions with the help of example	M2.03	U
	OR		
VI.	Summarize control statements with the help of example	M2.02	U
VII.	Outline Polymorphism in Python with example	M2.04	U
	OR		
VIII.	Explain looping statements with the help of example.	M2.02	U
IX.	Summarize Linear regession algorithm	M3.03	U
	OR		
X.	Explain various types of unsupervised learning algorithms.	M3.04	U
XI.	Summarize Decision tree classification algorithm.	M3.04	U
	OR		
XII.	Explain Binarization and Mean removal preprocessing methods	M3.05	U
XIII.	Implement bot to play Last coin standing game	M4.04	A
	OR		
XIV.	Explain Minimax search algorithm	M4.05	U

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