### **ALAGAPPA UNIVERSITY**

[Accredited with 'A+' Grade by NAAC (CGPA:3.64) in the Third Cycle and Graded as Category–I University by MHRD-UGC]

(A State University Established by the Government of Tamil Nadu)

Karaikudi. 630003.

### **Directorate of Distance Education**

### CONTINOUS INTERNAL ASSESMENT ( CIA )

### **ASSIGNMENT QUESTIONS**



**PROGRAMME CODE: 518** 

# DIPLOMA IN ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

(2022 - 2023)



## ALAGAPPA UNIVERSITY, KARAIKUDI DIRECTORATE OF DISTANCE EDUCATION

# CONTINUOUS INTERNAL ASSESSMENT (CIA) (2021 Calendar Year Onwards) - ASSIGNMENT QUESTIONS



**Learning Centre: Karaikudi (100)** 

Programme code	Programme Name	Semester
518	DIPLOMA IN ARTIFICIAL INTELLIGENCE	т
	AND MACHINLE LEARNAING	1

#### Instructions

- Assignments should be written in the candidate's own handwriting in the A4 white sheets on only one side of the paper.
- > Combine all course assignments into single spiral binding for submission.
- Maximum. Marks. 25 for each Course (Theory and Practical).
- > Internal Practical Test will be conducted <u>during PCP schedule</u> for Practical courses every semester.

### The list of assignment topics for each course is furnished below:

Course Code: 51811	Fundamentals of Artificial Intelligence
1. What is Artificial	Intelligence?
2. Explain about bes	t first search technique with algorithm.
3. Briefly explain about procedural knowledge.	
4. Write short note of	n neural network learning.

Course Code: 51812	Relational Database Management System (RDBMS)
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- 1. With neat diagram explain the architecture of DBMS.
- 2. Discuss in detail about various forms of normalization.
- 3. Explain about various Data Manipulation Language (DML) Statements with examples.

Cours	e Code: 51813	R Programming
1.	What are the feature	es of R Programming?
2.	2. Briefly explain about various control structure in R.	
3. Explain about vector and its manipulation.		

# Course Code: 52814 R Programming Lab INTERNAL EXAM PRACTICAL Write Aim, Algorithm, Source code, Input and Output;

1. Write a R program to perform matrix multiplication.

2. Write a R program to display the numbers between 1 and 10 as even number or odd using looping.

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# CONTINUOUS INTERNAL ASSESSMENT (CIA) (2021 Calendar Year Onwards) - ASSIGNMENT QUESTIONS



Learning Centre: Karaikudi (100)

Programme	Programme Name	Semester
code		
518	DIPLOMA IN ARTIFICIAL INTELLIGENCE AND	TT
	MACHINLE LEARNAING	11

#### **Instructions**

- Assignments should be written in the candidate's own handwriting in the A4 white sheets on only one side of the paper.
- > Combine all course assignments into single spiral binding for submission.
- Maximum. Marks. 25 for each Course (Theory and Practical).
- ➤ Model Practical Test will be conducted <u>during PCP schedule</u> for Practical courses every semester.

### The list of assignment topics for each course is furnished below:

Course Code: 51821	Fundamentals of Machine Learning
1. What are the applications of Machine Learning? Explain	
2. Discuss about Decision Tree classification with example.	
3. Explain about h	ierarchical clustering algorithm.

- 1. Explain in detail about back propagation neural network learning algorithm.
- 2. Briefly explain about fuzzy membership functions with neat diagram.
- 3. Discuss about the operations of Genetic algorithm.

### Course Code: 51823 Python Programming

- 1. Briefly explain about tuples and its functions with examples.
- 2. Explain about various manipulations of dictionary in Python.
- 3. Write short note on : Scipy and Numpy

# Course Code: 52824 Machine Learning using Python Lab INTERNAL PRACTICAL TEST

### Write Aim, Algorithm, Source code, Input and Output;

- 1. Write a program to perform list processing (create, change and remove elements from the list) in Python.
- 2. Write a Python program to perform k-means clustering.

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