ALAGAPPA UNIVERSITY

Karaikudi. 630003.

Directorate of Distance Education

CONTINOUS INTERNAL ASSESMENT (CIA)

ASSIGNMENT QUESTIONS

PROGRAMME CODE : 518

DIPLOMA
IN
ARTIFICIAL INTELLIGENCE AND MACHINE
LEARNING

(2021 Calendar Year)

Programme code	Programme Name	Semester
518	**DIPLOMA IN ARTIFICIAL INTELLIGENCE AND MACHINLE LEARNAING**	**I**

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 best first search technique with algorithm. 3. Briefly explain about procedural knowledge. 4. Write short note on neural network learning.	

Course Code: 51812	Relational Database Management System (RDBMS)
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.	

Course Code: 51813	R Programming
1. What are the features of R Programming? 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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Programme code	Programme Name	Semester
518	**DIPLOMA IN ARTIFICIAL INTELLIGENCE AND MACHINLE LEARNAING**	**II**

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 hierarchical clustering algorithm.	

Course Code: 51822	Principles of Soft Computing
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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