MANNAM MEMORIAL NSS COLLEGE, KOTTIYAM

STUDENT ENROLMENT LIST

Name of department : PHYSICS

Name of course : ARTIFICIAL INTELLIGENCE (2022-23)

Sl No	Name of Student	Signature
1	ADWAITHA S NAIR	
2	ANNILAL L	
3	APPU R	
4	G1 GOVIND KRISHNA	
5	GOURI SANKAR G1	
6	KARTHIK B S	
7	LEKSHMI BOSE	
8	KARTHIKA S	
9	MINNU B S	
10	NIKUL NATH R	
11	NIRANJANA KURUP R	
12	NITHEESH KUMAR S	
13	SHAFI S	
14	SREELEKSHMI UDAY	
15	ABHINANDH S	
16	ABHISHEK KRISHNAN	
17	~~ABHISHEK~~ AKASH MK PILLAI	
18	SREELEKSHMI B	
19	ALEN A'R	
20	ANAND T P	
21	ASHISH K JOHN	
22	AVANI AJITH	
23	DEVADUTT SB	
24	DEVANANDA M N	
25	MUHAMMED ALTHAF S	
26	MUHAMMED JASIN	
27	POOJA S	
28	REVATHY S	
29	ROHITH R	
30	SAJITHA S	
31	SREELEKSMI V.V	
32	SREYA P	
33	SURYA S	
34		

MANNAM MEMORIAL N.S.S. COLLEGE KOTTIYAM

DEPARTMENT OF PHYSICS
M. M. N. S. S. COLLEGE
KOTTIYAM

Department of Physics 2022-23

ARTIFICIAL INTELLIGENCE

Curriculum:

Introduction to artificial intelligence - Machine learning - History of AI - types of artificial intelligence - ANI - AGI - ASI - AI career - Applications of AI - chat bot - Design - social media - google search - speech recognition - Biometrics - online shopping - banking and personal use - transportation - Natural language study in AI - Fuzzy sets and fuzzy logic.

Objective

* to understand the relevance and concepts of artificial intelligence.
* Gain a historical perspective of AI
* to gain knowledge about different softwares for online chat conversation
* Become familiar with basic principles of AI towards problem solving

(Dr. Prabithe B. Nair)

MANNAM MEMORIAL N.S.S. COLLEGE KOTTIYAM, KOLLAM

DEPARTMENT OF PHYSICS
M. M. N. S. S. COLLEGE
KOTTIYAM.

3: Department of Physics

Course Schedule

10/11/22 Thursday	3.30 to 4.30pm	Introduction to AI
11/11/22 Friday	3.30 to 4.30pm	Machine learning
14/11/22 Monday	3.30 to 4.30 pm	History of AI, videos on AI
16/11/22 Wednesday	3.30 to 4.30pm	types of AI
19/11/22 Saturday	9.30 to 12.30pm	ANI, AGI, ASI
22/11/22 Tuesday	3.30 to 4.30pm	Applications of artificial intelligence
26/11/22 Saturday	9.30 to 3.30pm	chat bot, chatGPT Social media
30/11/22 Wednesday	3.30 to 4.30 pm	Design, google search
3/12/22 Saturday	9.30 to 3.00 pm	Speech recognition biometrics, banking
5/12/22 Monday	8.30 to 9.30 am	online shopping
8/12/22 Tuesday	8.30 to 9.30 am	personal use of AI
17/12/22 Saturday	9.30 - 3.00pm	Natural language Study in AI
1/1/23 Sunday	10.00 - 3.00pm	Fuzzy set and Fuzzy logic.

(Dr Prabitha B Nair)

Head of the Department of Physics
M. M. N. S. S. COLLEGE
KOTTIYAM.

Artificial Intelligence

Add On-Course 2022-23, PG Department of Physics
MM NSS College, Kottiyam

Total Marks: 50 **Duration: 2 Hours**

Section A: 1-Mark Questions *Answer all questions. Each question carries 1 mark.*

1. What is the primary goal of artificial intelligence?
2. Name one example of a machine learning algorithm used in AI.
3. What does "NLP" stand for in the context of AI?
4. Which AI technique is used for training models with labeled data?
5. What is the term for an AI system that mimics human decision-making?

Section B: 2-Mark Questions *Answer all questions. Each question carries 2 marks.*

6. Briefly explain the difference between supervised learning and unsupervised learning in machine learning.
7. What is a neural network, and what is its basic structure?
8. Describe the concept of "training data" in machine learning.
9. Explain what is meant by "overfitting" in the context of AI models.
10. What is a decision tree, and how is it used in AI?

Section C: 15-Mark Questions *Answer all questions. Each question carries 15 marks.*

11. **Introduction to AI Techniques:** a. Describe the main types of AI: narrow AI, general AI, and superintelligent AI.
    b. Provide examples of applications for each type of AI.
    c. Discuss the current state of AI research and its limitations.
12. **Machine Learning Algorithms:** a. Explain the basic principles of the following machine learning algorithms: Linear Regression and K-Nearest Neighbors (KNN).
    b. Compare and contrast these algorithms in terms of their use cases, strengths, and weaknesses.
    c. Provide a simple example of how each algorithm can be applied to a real-world problem.
13. **Neural Networks and Deep Learning:** a. Describe the architecture of a basic neural network, including layers such as input, hidden, and output layers.
    b. Explain the concept of backpropagation and its role in training neural networks.
    c. Discuss the advantages of deep learning over traditional machine learning methods, including examples of deep learning applications.
14. **Natural Language Processing (NLP):** a. Explain the key tasks involved in Natural Language Processing, such as tokenization, stemming, and named entity recognition.
    b. Describe the role of NLP in applications like chatbots and language translation systems.
    c. Discuss the challenges faced in NLP and how recent advancements have addressed these challenges.

Dr. Babitha B Nair

DEPARTMENT OF PHYSICS
M. M. N. S. S. COLLEGE
KOTTIYAM.

MANNAM MEMORIAL NSS COLLEGE, KOTTIYAM

END COURSE EVALUATION

Name of department : PHYSICS

Name of course : ARTIFICIAL INTELLIGENCE (2022-23)

Duration of exam : 2 hrs.

Total Marks : 50

Sl No	Name of Student	Marks Obtained
1	ADWAITHA S NAIR	50
2	ANNLAL L	50
3	APPU R	50
4	G GOVIND KRISHNA	36
5	GOURI SANKAR G	49
6	KARTHIK B S	48
7	KARTHIKA S	39
8	LEKSHMI BOSE	50
9	MINNU B S	49
10	NIKUL NATH R	35
11	NIRANJANA KURUP R	38
12	NITHEESH KUMAR S	35
13	SHAFI S	35
14	SREELEKSHMI UDAY	47
15	ABHINANDH S	39
16	SREELEKSHMI B	38
17	ABHISHEK KRISHNAN	35
18	AKASH M K PILLAI	48
19	ALEN A R	36
20	ANAND T P	35
21	ASHISH K JOHN	42
22	AVANI AJITH	48

23	DEVADUTT S B	44
24	DEVANANDA M N	46
25	MUHAMMED AITHAF S	35
26	MUHAMMED JASIN	36
27	POOJA S	49
28	REVATHY S	35
29	ROHIJITH R	35
30	SAJITHA S	50
31	SREELEKSMI V V	50
32	SREYAS P	49
33	SURYA S	48
34		
35		
36		
37		
38		
39		
40		
41		
42		
43		
44		
45		
46		
47		
48		
49		
50		

Dr. Rebitha T. Nair

Number of students enrolled: 33

Number of students completed: 33

Sulthanthan

DEPARTMENT OF PHYSICS
M. M. N. S. S. COLLEGE
KOTTIYAM.

Report

Certificate course on artificial intelligence was offered by the department of physics for the 1st year physics students. The course duration was 30 hours. The classes were taken on saturdays and before/after regular class hours. The course provide fundamental understanding of the history of AI and demonstrate awareness and a fundamental understanding of various applications of AI techniques. The course also discusses on the current scope and challenges of AI.

The feedback analysis shows that the students are much satisfied in the course contents & the classes.

Dr. Prabitha B Nair

Dr. Sitheertha S Nair
DEPARTMENT OF PHYSICS
M. M. N. S. S. COLLEGE
KOTTIYAM.

Principal
M.M. N.S.S. COLLEGE
KOTTIYAM