NOTICE

This is to inform all the students that the Department of Computer Science and Application, Pandu College is going to start One Add-on Certificate course from 06-12-2023. Therefore all the students of B.A./B.Sc./B.Com/B.C.A./Bio-Tech of different semesters and the ones who are interested are invited to join the courses for their academic benefits. Details of the courses are given below:

1) Course Name

: Artificial Intelligence

Duration

: 30 hours

Course Co-ordinator

: Epsita Medhi, 9706096707

Interested students can contact the course Co-ordinator of respective courses of the Computer Science and Application department on or before 4th December, 2023.

HoD

Dept of Computer Sc & Application

(pt 2/12/23

Pandu College.

Add - On Course

1. Name of the Course : - Artificial Intelligence

2. Duration : - 30 hours (22 Theory, 8 Practical)

3. Credit :-4

4. Course Objective : - The objective of the course ARTIFICIAL INTELLIGENCE is to

design a system, which is capable of thinking for itself just as humans do. Since AI machines include reasoning, solving a puzzle, making judgement, learning and communicating its own, and development of its system would be much beneficial. AI works on reverse engineering human capabilities and traits and have been applied to machines. The system works intelligently yet independently. This course curriculum will help the students gain knowledge about the introductory part and theoretical knowledge about Artificial Intelligence. Its programming part would help in getting some idea about how the smart machines work.

5. Course Outcome : - Through this course, the students can gain knowledge about the different traits of AI, the procedures behind and the programming sequences applied through it.

6. Syllabus

Unit 1: (4 Theory)

An introduction to Artificial Intelligence, State Space Search

Unit 2: (4 Theory)

Breadth First Search, Depth First Search, Heuristic Search Hill Climbing

Unit 3: (4 Theory)

Introduction to knowledge representation

Unit 4: (4 Theory)

Introduction to Rule Based System

Unit 5: (6 Theory)

Description of Hidden Markov Model

Machine Learning

Unit 6: (8 Practical)

Introduction to Prolog Programming

7. Reference/Books: - 1. 2. Basics of Artificial Intelligence and Machine Learning by Dr Dheeraj

Mehrotra

Full Signature of Course Coordinator: Epsita Medhi

Name of Department: Computer Science and Application

Date of Submission: 15/02/2024

Name of the Add on Course : INTRODUCTION TO ARTIFICIAL INTELLIGENCE.

Department : COMPUTER SCIENCE AND APPLICATION

Session : 2023 - 2024

Duration of the course : 30 hours

| SI. No. | Name of Student | Roll No. | Date of Enrollment | Signature of Student |
|---------|----------------------------|----------|-----------------------|----------------------|
| 1. | Aminun Islam | 1013 | 6-12-23 | ai |
| 2. | Arryan Gchosh | 1024 | 06-12-23 | Aryan Ghosh |
| 3. | Jyotimmoy Das | 1004 | 6-12-2023 | Lyotimmey Das |
| 4. | Bishal Dewri | 1009 | 6-12-23 | Bishal Dewni |
| 5. | Netumon Thakwia | 1006 | 06-12-23 | Mitumon Thanasia |
| 6 | Delpiyoti Rabha | 1012 | 6-12-23 | Deepsyoti Rabha |
| 7. | Dibyajyeti Rabha | 1008 | 6-12-2023 | Dibyojyeti Rabha. |
| 9. | | 1036 | 6-12-23 | Anvidas. |
| 9. | Anoj 203. Momoden Rabha | 1016 | 6-12-23 | 18 |
| 10 | Ringkhang Bone | 1027 | 06-12-2023 | Mrgkhang Bono |
| 11. | Abhishele Mazumder | 1030 | 06-12-23 | # |
| 12. | Mrinmoy Nath | 1014 | 06-12-23 | Wath |
| 13. | Gowar Duta | 1028 | 6-12-2023 | Butta |
| 14- | Klembar Timung | 1010 | 6-12-23 | Klimbar |
| 15 | Iswar chetri | 1031 | 6-12-23 | Isroan |
| 16 | Sultar Chand Daimerry | 1033 | 06-12-2023 | Swaj |
| 14 | Kankan Boro | 1014 | 6-12-23 | Kantar Boro |
| 15 | Kartek Madhi | 1029 | 86-12-2023 | Karti'K |
| 16 | Kaniskajit Malakar. | 1005 | 6-12-23 | Kaniskajit. |
| 17 | Ronit Bhownick | 1037 | 6-12-23 | Romit Mount |
| 18 | Nrisban Dutla | 1020 | 6-12-2023 | Mrisban |
| 19. | Avilarh Ghosh, | 1002 | 16-12-23 | Behorh |
| 261 | Banashre Bhuyen | 1035 | 6-12-23 | Brashing . |

EPSITA MEDHI
Course Coordinator

Head of the Department

ADD - ON- COURSE HOD- BHASKAR SINGHA

PANDU COLLEGE : COORD INATOR - EPSITA MEDHI BANKSTUDENT'S ATTENDANCE

| COORD INATOR - EPSITA MEDHI Grade STUDENT'S A | | | | | | | | | | | | | | | | | | |
|---|----------------------|------|-----|--------|----|-------|-------|-------|-------|---|-------|---------|---------|----|----|-----|----|----|
| | Class | •••• | | | | | | | | | - | | | A | T | T E | EN | 1 |
| Numbers | Name of Students | | 0,8 | 02 | 20 | 26/12 | 126/2 | 147/2 | 150/2 | | 22002 | 27 11 2 | 28 12/2 | 13 | 14 | 15 | 16 | 17 |
| | AVILASH GHOSH | P | p | p | P | P | p | P | P | P | P | P | P | | | | | |
| | ADITI ROY | P | P | P | P | | P | P | P | P | | • | P | | | | | - |
| | JYOTIRMOY DAS | | , | P | P | p | P | p | | | • | P | P | | | | | |
| 1 | KANISKAJIT MALAKAR. | • | P | P | * | * | P | P | 4 | | P | P | P | | | | | |
| | NITUMONI THAKURIA | P | P | 54 | | | P | p | 2 | * | P | P | • | | | | | |
| | ANURAG DUTTA | | • | | * | P | P | | | | | P | • | | | | | |
| | DIBYAJYOTI RABHA | P | p | P | p | S#// | | P | P | P | P | P | p | | | | | |
| | BISHAL DEWRI | , | 9 | P | P | P | P | P | | | P | P | P | | | | | |
| | KLIMBAR TIMUNG | p | p | P | P | P | • | * | P | P | P | P | p | E | | | | |
| | ROHIT SHARMA | p | P | 100.15 | P | P | P | | P | P | P | P | P | | | | | |
| | DEEPJYOTI RABHA | P | P | p | P | P | | P | P | P | • | P | P | | | | | |
| | AMINUR ISLAM. | p | p | p | P | P | P | (4) | P | P | P | P | * | | | | | |
| | MRINMOY NATH. | p | P | | P | p | P | P | P | P | P | P | P | | | | | |
| | MONOBEV RABHA | P | P | P | | | P | P | P | P | P | * | P | | | | | 7 |
| | KANKAN BORO | P | P | • | P | P | • | P | r | P | P | P | P | | | | | |
| | PRANJAL R MARAK | P | P | | | P | P | P | P | P | P | P | P | | | | | |
| | HRISHIKA CHAKRABORTY | | a | | 1 | P | P | | | | | P | P | | | | | |
| | GLORY TIGGA | , | P | 1 | r | P | | | | | | P | p | | | | | |
| | ANIRBAN DUTTA | P | P | P | p | P | P | | P | p | p | P | P | B | | | | |
| 14 | UTTAM SHARMA | Þ | P | P | P | | P | P | P | P | p | , | P | | | | | |
| | AMIT DEBNATH | P | P | P | P | P | P | P | 9 | | | P | P | | | | | |
| | PRIYA SINGHA | | | | , | P | P | | | | | P | , | | | | | |
| | ARYAN GHOSH | P | | | 4 | P | | P | | | P | | | | | | | |
| | RINGKHANG BORD | P | 1 | P | P | p | | P | P | P | P | P | P | | | | - | |
| 1 | GAURAV DUTTA | P | P | | P | P | | P | | | P | p | | - | | | + | + |
| | KARTIK MEDHI | | | | | | P | - | | | P | P | | | - | | + | |
| | ABHISHEK MAZUMBAR | P | P | P | P | P | | - | - | | P | P | P | | | | - | |
| | ISWAR CHETRI | p | p | , | P | P | P | P | P | P | P | | - | | - | | - | |
| | MEHMUS ALOM MONDAL | | | | | 1 | P | | | 1 | | | P | - | 1 | | - | - |
| | SURAT CHANA MAINARY | | | 100 | | | - | | | - | | 1 | 1 | | | - | - | 1 |

ASSESSMENT - I SUBJECT - INTRODUCTION TO ARTIFICIAL INTELLIGENCE NAME OF THE STUDENT: Konkon boxes

| Full Marks: 10 | | | Time: 30 minutes | | | | | |
|---------------------------|-----------------------------------|----------------------------|-------------------------------------|--|--|--|--|--|
| 1. Artificial Intelliger | nce is about | | | | | | | |
| a. Playing a game on | Computer | b Making | a machine Intelligent | | | | | |
| c. Programming on M | fachine with your Own Intelli | gence | | | | | | |
| d Putting your intelli | gence in Machine | | | | | | | |
| 2. Who is known as the | he "Father of AI"? | | | | | | | |
| (a) Fisher Ada (b) | Alan Turing (c) John Mo | Carthy (d) Aller | n Newell | | | | | |
| | propriate situation for that a b | | | | | | | |
| (a) Real-life situation | (b) Small Search Space, (c) | Complex game, (d) All of | the above | | | | | |
| 4. The application/app | plications of Artificial Intellig | gence is/are | | | | | | |
| (a) Expert Systems, | (b) Gaming, (c) Visio | n System (d) All o | of the above | | | | | |
| 5. Among the given o | ptions, which search algorith | m requires less memory? | | | | | | |
| | Depth First Search (c) B | | Linear Search | | | | | |
| 6) If a robot is able to | change its own trajectory as | per the external condition | as, then the robot is considered as | | | | | |
| the | | | | | | | | |
| (a) Mobile | (b) Non-Servo | (c) Open Loop | (d) Intelligent | | | | | |
| 7) Which of the given | language is not commonly u | sed for AI? | | | | | | |
| (a) LISP | (b) PROLOG | (c) Python | (d) Perl | | | | | |
| 8) A technique that v | was developed to determine | whether a machine cou | ld or could not demonstrate the | | | | | |
| artificial intelligence k | | | | | | | | |
| (a) Boolean Algebra, | (b) Turing Test, | (c) Logarithm, | (d) Algorithm | | | | | |
| 9) The component of a | n Expert system is | | | | | | | |
| (a) Knowledge Base, | (b) Inference Engine, | (c) User Interface, | (d) All of the above | | | | | |
| 10) An Al agent percei | ves and acts upon the enviro | onment using | | | | | | |
| (a) Sensors, | (b) Perceiver, | (c) Actuators, | (d) Both a and c | | | | | |

REPORT ON ARTIFICIAL INTELLIGENCE

An Add-On course on Artificial Intelligence has commenced from 6-12-2023 with the aim of

inculcating among the students the basic idea over the subject. The subject is included in the

BCA 2nd Semester course curriculum. Thirty four of the students already registered for the

course. This course aims to familiarize among the students, the recent trends and techniques of

artificial intelligence in accordance to machine learning and deep learning. Along with the

theory, practical classes are scheduled so that the students are capable of hands on

implementation. Prolog programming is explained for considering the logical calculation of

artificial intelligence.

Date: 27-03-2024

HOD

Dept of Computer Sc and Appl



Dept. of Computer Science and Internal Quality and Assurance Cell, Pandu College

Pandu, Maligaon, Guwahati-12

Regn No. AI/12-23/01

CERTIFICATE

This is to certify that Mr./Mrs./Miss Aminur Islam has completed successfully 30 hour Certificate course on "Introduction to Artificial Intelligence" held in Pandu College from 06/12/2023 to 17/05/2024.

(Mr. Dipjyoti Barman)

Co-ordinator, IQAC, Pandu College

(Mr. Bhaskar Singha)

HoD, Dept of Computer Sc., Pandu College

