

## **Course Coordinator Report**

### **Course Name: Artificial Intelligence**

A free Add-On Course for UG students in the Department of Computer Science, Shri Shivaji Education Society Amravati's Science College, Congress Nagar, Nagpur was held from 16<sup>th</sup> August 2022 to 22<sup>nd</sup> October 2022. The course title was "Artificial Intelligence". It is the complete beginner to Expert Course and was perfect for anyone who wants to learn Artificial Intelligence. AI encompasses various subfields, including machine learning, natural language processing, and computer vision.

In this course the students learned about Fundamentals of AI. They learned to Apply AI Techniques to Real-World Problems. Students were able to critically evaluate AI solutions.

The course duration was 10 weeks (30 hours). Two theory classes were engaged on Friday & Saturday and one Practical was engaged every week. The structure of marking system was 60 marks on theory paper and 40 marks on practical execution. The question paper of theory examination was in MCQ type of 60 questions with four multiple choices. Practical examination was also taken on this course for 40 marks. Out of 87, 85 students appeared and passed in both theory and practical examination. The result was prepared and certificates were distributed to the students.

Dr. S. R. Gedam  
Course Coordinator

To,  
The Principal  
SSES Am's Science College,  
Congress Nagar, Nagpur-12

Subject: Permission to conduct the add on courses in the Computer  
Science department during the session 2022-2023

Respected Sir,

This is to request you that, we wish to conduct the add on courses in  
Computer Science department these are the certificate courses of thirty  
hours' time duration.


The details of the courses are submitted here with.

Hence please permit to run the same and oblige me.

Thanking you

Yours sincerely

2/07/2022

  
Professor & Head  
Department of Computer Science  
S S E S Am's Science College  
Congress Nagar, Nagpur

*Permitted*  
*as above*

**SSES Amravati's Science College, Congress Nagar, Nagpur-12**  
**DEPARTMENT OF COMPUTER SCIENCE**


**Date: 04-08-2022**


## Notice

All the students of B.Sc. are hereby informed that Department of Computer Science is conducting a skill based course titled Artificial Intelligence. This course aims to enhance your practical skills and knowledge in Artificial Intelligence. Register on or before 13 August 2022. Looking forward to your active participation.

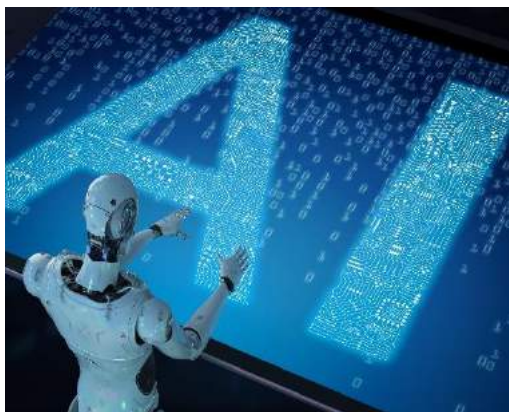
### Course Details:

- **Course Name:** Artificial Intelligence
- **Duration:** 16 August 2022 to 22 October 2022
- **Schedule:** 10 week
- **Eligibility:** Any Undergraduate

  
Course Coordinator  
**Dr. S. Gedam**  
Assistant Professor  
Department of Computer Science  
S.S.E.S. Amravati's Science College  
Congress Nagar, Nagpur

  
Professor & Head  
Department of Computer Science  
S.S.E.S. Amravati's Science College  
Congress Nagar, Nagpur

# CERTIFICATE COURSE IN ARTIFICIAL INTELLIGENCE



## Free Certificate Course for College Students

Duration – 30 Hours( 10 Weeks)

Process of Registration- Early

Birds will be admitted

### Course Objectives:

- 1) To Understand the Fundamentals of AI
- 2) Explore the Ethical and Societal Impacts of AI
- 3) Understand Advanced AI Topics
- 4) Apply AI Techniques to Real-World Problems:
- 5) Critically Evaluate AI Solutions



**Department of Computer Science**  
**SSES Amt 's Science College, Congress**  
Nagar, Nagpur

\* AI encompasses various subfields, including machine learning, natural language processing, and computer vision. Machine learning, a core aspect, involves algorithms that enable computers to learn from and make decisions based on data. AI systems can perform tasks such as recognizing speech, understanding natural language, and playing strategic games. They are used in diverse applications like healthcare for diagnosing diseases, in finance for fraud detection, and in autonomous vehicles for navigation. Ethical considerations are critical in AI development, addressing issues like bias, privacy, and job displacement. Continuous advancements in AI technology promise significant benefits but also pose complex challenges that society must navigate responsibly.

**Last Date of Registration: 13 August 2022**  
**For Registration Contact: Dr. (Mrs) Shilpa R. Gedam (Coordinator)**

Professor & Head  
Department of Computer Science  
S.S.E.S. Am's Science College,  
Congress Nagar, Nagpur

**SSES Amravati's Science College, Congress Nagar, Nagpur-12**  
**DEPARTMENT OF COMPUTER SCIENCE**  
**COURSE MODULE AND SYLLABUS**

**Course Title: Certificate Course in Artificial Intelligence**

**Course Coordinator : Dr. Mrs. Shilpa R. Gedam**

**Course description:**

This course provides a comprehensive introduction to the fundamental concepts and techniques of Artificial Intelligence (AI). Students will explore the core principles of AI, including problem-solving, knowledge representation, reasoning, machine learning, natural language processing, and robotics. The course covers both theoretical foundations and practical applications of AI, emphasizing how AI technologies can be applied to solve real-world problems.

1. **History and Evolution of AI:** Understanding the development and milestones in AI.
2. **Search Algorithms:** Techniques for problem-solving and decision-making in AI.
3. **Machine Learning:** Supervised, unsupervised, and reinforcement learning methodologies.
4. **Neural Networks and Deep Learning:** Fundamentals and applications in various domains.
5. **Natural Language Processing:** Techniques for language understanding and generation.
6. **Computer Vision:** Methods for interpreting and processing visual data.
7. **AI Ethics and Society:** Exploring the ethical implications and societal impact of AI.

**Course Objectives:**

- 1) To Understand the Fundamentals of AI
- 2) Explore the Ethical and Societal Impacts of AI
- 3) Understand Advanced AI Topics
- 4) Apply AI Techniques to Real-World Problems:
- 5) Critically Evaluate AI Solutions

**Instructional Strategies:** Theory class, Practical, Video clips, Models etc.

**Evaluation Strategies:** Oral discussions and Final MCQ examination.

**Course outline:** Course Outlines:

- 1) **Introduction to AI, Problem Solving and Search Algorithms**
- 2) **Knowledge Representation and Reasoning**
- 3) **Machine Learning Basics**
- 4) **Neural Networks and Deep Learning**
- 5) **Natural Language Processing (NLP)**
- 6) **Computer Vision**
- 7) **Reinforcement Learning**
- 8) **AI Ethics and Society**
- 9) **Practical AI Projects**

### Course Outcomes (COs):

- 1) To Gain a solid understanding of the basic concepts and techniques used in AI.
- 2) To Develop the ability to implement AI algorithms and models using programming languages like Python.
- 3) To Apply AI methods to practical problems in fields such as healthcare, finance, and autonomous systems.
- 4) To Critically analyze the ethical and societal issues related to AI and propose responsible solutions.

**Duration of course:** Ten weeks (30 Hours)

### The Structure of Syllabus and system of evaluation -

Course	Theory Papers and Practical	Total Marks	
		Theory	Practical
Certificate Course in Artificial Intelligence	Theory paper- Artificial Intelligence * Theory examination will be of MCQ pattern having 60 or 80 questions each with equal marks.	60	40
	* Practical examination will be based on performance evaluation in the laboratory	100	

  
Internal Quality Assurance Cell  
(IQAC)  
S. S. E. S. A. Science College  
Congress Nagar, Nagpur.

  
Principal  
S. S. E. S. Amravati's  
Science College, Nagpur.

# SYLLABUS

Certificate course (10 weeks)  
(Artificial Intelligence)

## Theory-

### UNIT- I

Introduction to AI, Problem Solving and Search Algorithms
Knowledge Representation and Reasoning
Machine Learning Basics

### UNIT – II

Neural Networks and Deep Learning
Natural Language Processing (NLP)
Computer Vision

### UNIT – III

Reinforcement Learning
AI Ethics and Society
Practical AI Projects

## Practicals-

1. Write a Program to implement Tic Tac Toe Game, Water Jug Problem.
2. Write a Program to implement Breath first search algorithm, Depth-First Search (DFS) algorithm and Best first search algorithm.
3. Write a Program to implement A\* Algorithm, AO\* Algorithm and min - max algorithm.
4. Write a program to implement Alpha-Beta pruning and Hierarchical planning.
5. Write a program to demonstrate pattern recognition for recognizing email addresses within a block of text.
6. Write a Program to demonstrate text preprocessing and tokenization using regular expressions.
7. Write a Program to implement psychological modelling and Knowledge representation in AI.

## Distribution of marks: -

UNIT I- 20 marks (Theory)

UNIT II- 20 marks(Theory)

UNIT III- 20 marks (Theory)+40 (practicals)


**Week-wise teaching plan:**


Week	Hrs.	Syllabus
Week 1	1	Introduction to AI
	2	Problem Solving, Search Algorithms
Week 2	1	Knowledge Representation
	2	Knowledge Reasoning
Week 3	1	Machine Learning Basics
	2	Machine Learning Basics
Week 4	1	Neural Networks and
	1	Deep Learning
Week 5	1	Natural Language Processing (NLP)
	2	Language models and sequence labeling
Week 6	2	Computer Vision
	1	Image processing fundamentals
Week 7	2	Convolutional neural networks (CNNs) for vision tasks
	1	Applications in image classification, object detection, and face recognition
Week 8	2	Reinforcement Learning
	1	Markov decision processes (MDPs)
Week 9	2	AI Ethics and Society
	1	AI Ethics and Society
Week 10	1	Practical AI Projects
	2	Practical AI Projects

**SSS AMT'S SCIENCE COLLEGE, CONGRESS NAGAR, NAGPUR-12**

**Certificate Course in Artificial Intelligence  
Time Table**

Day	Theory
Friday	SRG (B9) Theory 4.00 PM – 5.00 PM
Saturday	SRG (B9) Theory, 4.00 PM – 5.00 PM
	SRG (Computer Laboratory) practical, 5.00 PM – 6.00 PM

  
Course Coordinator  
**Dr. S. Gedam**  
Assistant Professor  
Department of Computer Science  
S.S.E.S. Amt's Science College  
Congress Nagar, Nagpur

  
Professor & Head  
Department of Computer Science  
S.S.E.S. Amt's Science College  
Congress Nagar, Nagpur

# Student Registration List

## Add on Course: Artificial Intelligence

Registration Course for BSc (Students)		
Artificial Intelligence		
1	druja Nagsikar	<u>AD</u>
2	khushi AKre	<u>khushiA</u>
3	MUGDHA DAKHOLE	<u>MRD</u>
4	Aparajita Biswal	<u>ABiswal</u>
5	Falguni Singalwar	<u>FS</u>
6	Princy Gupta	<u>PG</u>
7	Sanika Kishikar	<u>Kishikar</u>
8	Sanika Choudhari	<u>Choudhari</u>
9	Sanjana Lende	<u>Lende</u>
10	Abhisakti Ghugal	<u>Abhis</u>
11	AJINKYA INGLE	<u>Ingle</u>
12	Arpit Bangre	<u>ArpitB</u>
13	Harshik Mourya	<u>HMourya</u>
14	Hitesh Julmali	<u>HJulmali</u>
15	H. Batwe	<u>Rushikesh</u>
16	Mahendra Dwangan	<u>MD</u>
17	M. Lulakhe	<u>MSulakhe</u>
18	Sauresh Damase	<u>SDamase</u>
19	Ujjwal Mankar	<u>UjjwalM</u>
20	Vansh Gulne	<u>VGulne</u>
21	Vrudathi Niranjane	<u>Niranjane</u>
22	Ayesha Siddique	<u>ASiddique</u>
23	Agleesh Iyer	<u>Aiyer</u>
24	Akshata Padhav	<u>APadav</u>
25	Akshaya Iyer	<u>AKshaya</u>
26	Anjali Jaiswal	<u>AJaiswal</u>
27	Arya Kadu	<u>AK</u>
28	Astha Kadu	<u>Asthat</u>
29	Bhushan Mourya	<u>BM</u>
30	Divyashri Gajbhiye	<u>DG</u>

31	EKta Sant	<del>Sante</del>
32	Geetanjali Jatge	Geetal
33	Gouri Doifode	Gouri
34	GUNJAN MOURYA	<del>GUNJAN</del>
35	Ishika Naik	Ishika N
36	Ishika Shrivastava	Shrivastava
37	JANHAVI DIWAKAR	<del>J</del>
38	Jayant Halder	Halder
39	Jyoti Chavan	Jyoti Ch
40	Kalyani Nagpure	K Nagpure
41	Kiran Rao	K Rao
42	Madhura Pathak	Madhura
43	Nandini Fasi	N Fasi
44	Olleen Desai	<del>Olleen</del>
47	Parmita Deshbhratar	P Deshbhratar
48	Parth Virchare	Virchare
49	Pranali Porchattiwar	P Porchattiwar
50	RAJAT TIWARI	RTiwari
51	Riddhi Kohad	Riddhi
52	Riya Singh	R Singh
53	Rohan Nimje	<del>Nimje</del>
54	Romit Chaudhary	R Chaudhary
53	Shreya Dhokwal	S Dhokwal
54	Sudhanshu Sakare	S Sakare
55	Sweth Pimpalkar	S Pimpalkar
56	Tanmay Karanjekar	T Karanjekar
57	T. P. Nagrale	Nagrale
58	Tanuja Shende	T Shende
59	J. K. Kadu	<del>J K</del>
60	Vishaka Khiani	V Khiani

61	Diptika Shripad	D Shripad
62	Ravina Kamble	Ravina Kamble
63	Manu Hedoo	M Hedoo
64	ISHKA ZARBADE	Zarbad
65	K. Ramteke	K Ramteke
66	Yashpreet Singh	Yashpreet S
67	Piyush Meshraw	Piyush M
68	Heba Mahore	H Mahore
69	Nikita Mate	Nikita M
70	Pragati Singh	Pragati S
71	Jay Chavkar	Jay Chavkar
72	Purva Landge	Purva L
73	Abhinav G.	Abhinav G
74	Vibhansha Patil	V Patil
75	AVINASH TAKOTE	Avinash T
76	Sakshi Runghe	Sakshi R
77	Vaibhav Kakde	Vaibhav K
78	Sayali Khante	Sayali K
79	Vinay Gawande	V Gawande
80	Shruti Tulke	Shruti T
81	Akshada Girhe	A Girhe
82	Sonam Chhaware	Sonam C
83	Rinku Hattewar	Rinku H
84	Sakshi Pureswani	Sakshi P
85	V. Umathe	V Umathe
86	D. Chavkar	D Chavkar
87	Om Mangale	Om Mangale

**SSES Amravati's Science College, Congress Nagar, Nagpur-12**  
**DEPARTMENT OF COMPUTER SCIENCE**

**Certificate course (10 weeks)**  
**(Artificial Intelligence)**

**Students Registration List**

**Session 2022-2023**

Sr. No	Name of Student
1	Anuja J Nagrikar
2	Khushi K Akre
3	Mugdha R Dakhole
4	Aparajita A Biswas
5	Falguni A Singalwar
6	Princy Gupta
7	Sanika Kashikar
8	Sanika Choudhari
9	Sanjana Lende
10	Abhisakti Ghugal
11	Ajinkya Ingle
12	Arpit Bangre
13	Harshit Mourya
14	Hitesh Fulmali
15	Htrushikesh Batwe
16	Mahendra Dwangan
17	Mandar Sulakhe
18	sarvesh Daware
19	Ujjwal Mnkar
20	Vinay Hulke
21	Vruddhi Niranjane
22	Ayesha A Siddique
23	Agilesh J Iyer
24	Akshata S Jadhav
25	Akshaya R Iyer
26	Anjali Jaiswal
27	Arya G Kadu
28	Astha Kadu
29	Bhushan P Mourya
30	Diyashri S Gajbhiye
31	Ekta V Sant
32	Geeanjali P Jatgade

33	Gouri A Doifode
34	Gunjan V Mourya
35	Ishika S Naik
36	Ishita S Shrivastava
37	Janhavi P Diwakar
38	Jayant J Haldar
39	Jyoti D Chavan
40	Kalyani M Nagapure
41	Kiran Rao
42	Madhura M Pathak
43	Nandini A Pasi
44	Osheen D Arora
45	Parmita S DeshBhratar
46	Parth S Virkhare
47	Pranali S Porchattiwari
48	Rajat B Tiwari
49	Riddhi C Kohad
50	Riya R Singh
51	Rohan K Nimje
52	Romit R Chaudhary
53	Shreya N Dhokwal
54	Sudhanshu Sakare
55	Sweth A Pimpalkar
56	Tanmay K Karanjekar
57	Tanmay P Nagrale
58	Tanuja K Shinde
59	Tanushka A Kadu
60	Vishaka M Khiani
61	DIPIKA SHRIPAD
62	RAVINA KAMBLE
63	MANSI HEDAOO
64	ISHIKA ZARBADE
65	KALYANI RAMTEKE
66	YASHPREET SINGH
67	PIYUSH MESHRAM
68	NEHA MAHORE
69	NIKITA MATE
70	PRAGATI SINGH
71	JAY CHIREKAR
72	PURVA LANDGE
73	ABHINAV GOTMARE
74	VIBHANSHA PATIL
75	AVINASH TAKOTE

76	SAKSHI RUNGHE
77	VAIBHAV KAKDE
78	SAYALI KHANKE
79	VINAY GAWANDE
80	SHRUTI HULKE
81	AKSHADA GIRHE
82	SONAM CHHAWARE
83	RINKU HATTEWAR
84	SAKSHI PURSWAMI
85	VIDNYANI UMATHE
86	DIVYANSHU CHOUKSEY
87	OM MANGLE

# Attendance Sheet

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P	P	P	P	
P	P			
P	P	P	P	

Jedam  
 Assistant Professor  
 Department of Science  
 S.S.E.S. Am...  
 ...

28	Astha Kado
29	Bhushan P'Mourya
30	Diyashri S Gajbhaye
31	Eka V Sant
32	Geenjali P Jalgade
33	Gouri A Dofode
34	Gurjan V Mourya
35	Ishika S Naik
36	Ishita S Shrivastava
37	Janhavi P Diwakar
38	Jayant J Haldar
39	Jyoti D Chavan
40	Kalyani M Nagpure
41	Kiran Rao
42	Madhura M Pathak
43	Nandini A Pasi
44	Oshcen D Arora
45	Parmata S Desh-Bhatrar
46	Parth S Virkhare
47	Pranali S
48	Rajat B Tiwari
49	Riddhi C Kohad
50	Riya R Singh
51	Rohan K Nimje
52	Romit R Chaudhary
53	Shreya N Dhokval
54	Sudharshu Saicare
55	Sweth A Pimpalkar
56	Tamray K Karanjekar
57	Tamray P Nagarle
58	Tanujo K Shinde
59	Tanushka A Kado

Assistant Professor of  
Department of Computer Science  
S.S.E.S. Arvi's Science College,  
Congress Nagar, Nagpur



**SSES Amravati's Science College, Congress Nagar, Nagpur-12**

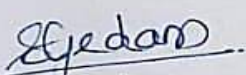
**DEPARTMENT OF COMPUTER SCIENCE**


**Date: 24-11-2022**

## **Notice**

All the students who are registered for the Certificate course in Artificial intelligence are hereby informed that the theory and practical examination is scheduled as given below.

Examination	Date	Place	Time
Theory	28-10-2022	Computer laboratory	11:00 to 1:00
Practical	29-10-2022	Computer laboratory	11:00 to 1:00

  
Course Coordinator  
**Dr. S. Gedam**  
Assistant Professor  
Department of Computer Science  
S.S.E.S. Am's Science College  
~~Congress Nagar, Nagpur~~

  
Head of Department  
Professor & Head  
Department of Computer Science  
S.S.E.S. Am's Science College  
Congress Nagar, Nagpur

SSES Amravati's Science College, Congress Nagar, Nagpur-12





DEPARTMENT OF COMPUTER SCIENCE

COURSE MODULE AND SYLLABUS

Course Title: Certificate Course in Artificial Intelligence

Date: 28-10-2022

### Attendance Sheet: Theory Examination

Roll . No.	Name of Student	Signature
AI-1	ANUJA J NAGRIKAR	
AI-2	KHUSHI K AKRE	khushiA.
AI-3	MUGDHA R DAKHOLE	MRS
AI-4	APARAJITA A BISWAS	AP Biswas
AI-5	FALGUNI A SINGALWAR	
AI-6	PRINCY GUPTA	
AI-7	SANIKA KASHIKAR	kashikarS
AI-8	SANIKA CHOUDHARI	SChoudari
AI-9	SANJANA LENDE	Shande
AI-10	ABHISAKTI GHUGAL	Abhig
AI-11	AJINKYA INGLE	ajinkya
AI-12	ARPIT BANGRE	ArpitB
AI-13	HARSHIT MOURYA	H Mourya
AI-14	HITESH FULMALI	H Fulmale
AI-15	HTRUSHIKESH BATWE	Rushikesh.
AI-16	MAHENDRA DWANGAN	
AI-17	MANDAR SULAKHE	M. Sulakhe
AI-18	SARVESH DAWARE	S. Daware
AI-19	UJJWAL MNKAR	UjjwalM
AI-20	VINAY HULKE	V. Hulke
AI-21	VRUDDHI NIRANJANE	V. Niranjane

AI-22	AYESHA A SIDDIQUE	<u>A Siddique</u>
AI-23	AGILESH J IYER	<u>A Jyer</u>
AI-24	AKSHATA S JADHAV	<u>A Jadhav</u>
AI-25	AKSHAYA R IYER	<u>A Kshaya R</u>
AI-26	ANJALI JAISWAL	<u>A Jaiswal</u>
AI-27	ARYA G KADU	<u>A G Kadu</u>
AI-28	ASTHA KADU	<u>Astha Kadu</u>
AI-29	BHUSHAN P MOURYA	<u>B P Mourya</u>
AI-30	DIYASHRI S GAJBHIYE	<u>D S GaJBhiye</u>
AI-31	EKTA V SANT	<u>E V Sant</u>
AI-32	GEEANJALI P JATGADE	<u>Geeanjali P</u>
AI-33	GOURI A DOIFODE	<u>G A Doifode</u>
AI-34	GUNJAN V MOURYA	<u>G V Mourya</u>
AI-35	ISHIKA S NAIK	<u>I S Naik</u>
AI-36	ISHITA S SHRIVASTAVA	<u>I S Shrivastava</u>
AI-37	JANHAVI P DIWAKAR	<u>J P Diwakar</u>
AI-38	JAYANT J HALDAR	<u>J Haldar</u>
AI-39	JYOTI D CHAVAN	<u>J D Chavan</u>
AI-40	KALYANI M NAGAPURE	<u>K M Nagpure</u>
AI-41	KIRAN RAO	<u>K Rao</u>
AI-42	MADHURA M PATHAK	<u>M Pathak</u>
AI-43	NANDINI A PASI	<u>N A Pasi</u>
AI-44	OSHEEN D ARORA	<u>O D Arora</u>
AI-45	PARMITA S DESHBHIRATAR	<u>P S Deshbhiratar</u>
AI-46	PARTH S VIRKHARE	<u>P S Virkhare</u>
AI-47	PRANALI S PORCHATTIWAR	<u>P Porchattiwar</u>
AI-48	RAJAT B TIWARI	<u>R B Tiwari</u>
AI-49	RIDDHI C KOHAD	<u>R C Kohad</u>

AI-50	RIYA R SINGH	RSingh
AI-51	ROHAN K NIMJE	<del>RNimje</del>
AI-52	ROMIT R CHAUDHARY	RChaudhary
AI-53	SHREYA N DHOKWAL	SDhokwal
AI-54	SUDHANSHU SAKARE	SSakare
AI-55	SWETHI A PIMPALKAR	SPimpalkar
AI-56	TANMAY K KARANJEKAR	TKaranje
AI-57	TANMAY P NAGRALE	TNagrale
AI-58	TANUJA K SHINDE	TShinde
AI-59	TANUSHKA A KADU	TKadu
AI-60	VISHAKA M KIHANI	VKihani
AI-61	DIPIKA SHIRIPAD	DShiripad
AI-62	RAVINA KAMBLE	Ravinakamble
AI-63	MANSI HEDAOO	MHedao
AI-64	ISHIKA ZARBADE	Absent
AI-65	KALYANI RAMTEKE	KRamteke
AI-66	YASHPREET SINGH	Yashpreet
AI-67	PIYUSH MESHARAM	PMesharam
AI-68	NEHA MAHORE	NMahore
AI-69	NIKITA MATE	NikitaM
AI-70	PRAGATI SINGH	PSingh
AI-71	JAY CHIREKAR	JChirekar
AI-72	PURVA LANDGE	PurvaLg
AI-73	ABHINAV GOTMARE	AGotmare
AI-74	VIBHANSHA PATIL	VPatil
AI-75	AVINASH TAKOTE	ATakote
AI-76	SAKSHI RUNGHE	SakshiR
AI-77	VAIBHAV KAKDE	VKakde

AI-78	SAYALI KHANKE	<u>Sayalikhake</u>
AI-79	VINAY GAWANDE	<u>Vinaygawande</u>
AI-80	SHRUTI HULKE	<u>Hulke</u>
AI-81	AKSHADA GIRHE	<u>A Girhe</u>
AI-82	SONAM CHHAWARE	<u>SonamChh</u>
AI-83	RINKU HATTEWAR	<u>RinkuH</u>
AI-84	SAKSHI PURSWAMI	<u>Sakshi</u>
AI-85	VIDNYANI UMATHE	<u>Vidnyani</u>
AI-86	DIVYANSHU CHOUKSEY	<u>Divyanshu</u>
AI-87	OM MANGLE	<u>Mangle</u>

S.R. Gedam  
Course Coordinator  
Dr S.R. Gedam  
Assistant Professor  
Department of Computer Science  
S.S.E.S. Am's Science College,  
Congress Nagar, Nagpur

S.R. Pande  
Head of Department  
Prof. S.R. Pande  
Professor & Head  
Department of Computer Science  
S.S.E.S. Am's Science College,  
Congress Nagar Nagpur

SSES Amravati's Science College, Congress Nagar, Nagpur-12



DEPARTMENT OF COMPUTER SCIENCE

COURSE MODULE AND SYLLABUS

Course Title: Certificate Course in Artificial Intelligence

Date: 29-10-2022

Attendance Sheet: Practical Examination

Roll . No.	Name of Student	Signature
AI-1	ANUJA J NAGRIKAR	
AI-2	KHUSHI K AKRE	<u>khushiA.</u>
AI-3	MUGDHA R DAKHOLE	<u>MRD</u>
AI-4	APARAJITA A BISWAS	<u>Apbiswas</u>
AI-5	FALGUNI A SINGALWAR	<u>FS.</u>
AI-6	PRINCY GUPTA	<u>PG</u>
AI-7	SANIKA KASHIKAR	<u>Kashika</u>
AI-8	SANIKA CHOUDHARI	<u>SChoudari</u>
AI-9	SANJANA LENDE	<u>Slende</u>
AI-10	ABHISAKTI GHUGAL	<u>Abhig</u>
AI-11	AJINKYA INGLE	<u>IngleA</u>
AI-12	ARPIT BANGRE	<u>ArpitB</u>
AI-13	HARSHIT MOURYA	<u>H.Mourya</u>
AI-14	HITESH FULMALI	<u>H.Fulmali</u>
AI-15	HTRUSHIKESH BATWE	<u>Rushikesh.</u>
AI-16	MAHENDRA DWANGAN	
AI-17	MANDAR SULAKHE	<u>MSulakhe</u>
AI-18	SARVESH DAWARE	<u>SDaware</u>
AI-19	UJJWAL MNKAR	<u>UjjwalM</u>
AI-20	VINAY HULKE	<u>VHulke</u>

AI-21	VRUDDHI NIRANJANE	VM Niranjane
AI-22	AYESHA A SIDDIQUE	ASiddique
AI-23	AGILESH J IYER	AJyer
AI-24	AKSHATA S JADHAV	AJadh
AI-25	AKSHAYA R IYER	Akshaya
AI-26	ANJALI JAISWAL	ATaiswal
AI-27	ARYA G KADU	AKadu
AI-28	ASTHA KADU	ASThak
AI-29	BHUSHAN P MOURYA	BMourya
AI-30	DIYASHRI S GAJBHIYE	DJ
AI-31	EKTA V SANT	ESant
AI-32	GEEANJALI P JATGADE	GeetaJ
AI-33	GOURI A DOIFODE	Gourid
AI-34	GUNJAN V MOURYA	GunjanV
AI-35	ISHIKA S NAIK	IshikaN
AI-36	ISHITA S SHRIVASTAVA	Ishivastava
AI-37	JANHAVI P DIWAKAR	JPDiwakar
AI-38	JAYANT J HALDAR	JHaldar
AI-39	JYOTI D CHAVAN	JyotiCh
AI-40	KALYANI M NAGAPURE	KNagpure
AI-41	KIRAN RAO	KRao
AI-42	MADHURA M PATHAK	Madhurat
AI-43	NANDINI A PASI	NPasi
AI-44	OSHEEN D ARORA	OSheena
AI-45	PARMITA S DESHBHRATAR	PDeshbhratar
AI-46	PARTH S VIRKHARE	PVirkhare
AI-47	PRANALI S PORCHATTIWAR	PPorchattiwar.
AI-48	RAJAT B TIWARI	RTiwari



AI-49	RIDDHI C KOHAD	Riddhi C
AI-50	RIYA R SINGH	RSingh
AI-51	ROHAN K NIMJE	Nimje
AI-52	ROMIT R CHAUDHARY	Rchoudhary
AI-53	SHREYA N DHOKWAL	SDhokwal
AI-54	SUDHANSHU SAKARE	SSakare
AI-55	SWETHI A PIMPALKAR	SPimpalkar
AI-56	TANMAY K KARANJEKAR	TKaranje
AI-57	TANMAY P NAGRALE	PNagrale
AI-58	TANUJA K SHINDE	TShinde
AI-59	TANUSHKA A KADU	TKadu
AI-60	VISHAKA M KIHANI	Vishaka M
AI-61	DIPIKA SHRIPAD	DShripad
AI-62	RAVINA KAMBLE	Ravinakamble
AI-63	MANSI HEDAOO	MHedao
AI-64	ISHIKA ZARBADE	Izarbade
AI-65	KALYANI RAMTEKE	Kalyani R
AI-66	YASHPREET SINGH	Yashpreet S
AI-67	PIYUSH MESHRAM	PMeshram
AI-68	NEHA MAHORE	NMahore
AI-69	NIKITA MATE	Nikita M
AI-70	PRAGATI SINGH	PSingh
AI-71	JAY CHIREKAR	JChirekar
AI-72	PURVA LANDGE	PLandge
AI-73	ABHINAV GOTMARE	AGotmare
AI-74	VIBHANSHA PATIL	VPatil
AI-75	AVINASH TAKOTE	ATakote
AI-76	SAKSHI RUNGHE	Sakshi R

AI-77	VAIBHAV KAKDE	Vaibhav
AI-78	SAYALI KHANKE	Sayalikhankar
AI-79	VINAY GAWANDE	V. Gawande
AI-80	SHRUTI HULKE	Absent
AI-81	AKSHADA GIRHE	A. Girhe
AI-82	SONAM CHILAWARE	Sonamchi
AI-83	RINKU HATTEWAR	Rinkuhatte
AI-84	SAKSHI PURSWAMI	Sakshi
AI-85	VIDNYANI UMATHE	Vidnyani
AI-86	DIVYANSHU CHOUKSEY	Divyanshu
AI-87	OM MANGLE	Mangle

Gedam  
Course Coordinator

Dr. S. R. Gedam  
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Pand  
Head of Department

Prof. S. R. Pand  
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Congress Nagar, Nagpur

**SSES Amravati's Science College, Congress Nagar, Nagpur-12**  
**DEPARTMENT OF COMPUTER SCIENCE**  
**Certificate course in Artificial Intelligence**  
**Theory Examination**

**Date: 28/10/2022**

**Max Marks : 60**

**Time :11:00 am to 1:00 pm**

**Roll No :**

**Name of Student :**

Note: 1. All questions are compulsory and carry equal marks

2. Tick only one correct option

1. Which search strategy uses a heuristic to guide its search?

- A) Breadth-First Search
- B) Depth-First Search
- C) A\* Search
- D) Uniform Cost Search

2. What is the main advantage of using informed search algorithms over uninformed ones?

- A) They are easier to implement
- B) They require less memory
- C) They can find solutions more quickly by using heuristics
- D) They guarantee the optimal solution

3. Which of the following is a knowledge representation technique?

- A) Neural Networks
- B) Decision Trees
- C) Semantic Networks
- D) Genetic Algorithms

4. First-order logic is also known as:

- A) Propositional Logic
- B) Predicate Logic
- C) Temporal Logic
- D) Modal Logic

5. Ontologies are used in AI to:

- A) Create learning algorithms
- B) Represent knowledge in a structured form
- C) Visualize data
- D) Optimize search algorithms

6. What is the goal of supervised learning?

- A) To find hidden patterns in data without labeled examples
- B) To use labeled examples to learn a mapping from inputs to outputs
- C) To group similar data points into clusters

- D) To reduce the dimensionality of the data

7. Which of the following is an example of a classification algorithm?

- A) Linear Regression
- B) K-Means Clustering
- C) Decision Trees
- D) Principal Component Analysis

8. In unsupervised learning, which technique is used for grouping similar data points?

- A) Regression
- B) Classification
- C) Clustering
- D) Dimensionality Reduction

9. A neural network with more than one hidden layer is called:

- A) Convolutional Neural Network
- B) Recurrent Neural Network
- C) Deep Neural Network
- D) Single Layer Perceptron

10. Which type of neural network is primarily used for image processing?

- A) Recurrent Neural Network
- B) Convolutional Neural Network
- C) Feedforward Neural Network
- D) Generative Adversarial Network

11. Backpropagation is used in neural networks for:

- A) Data preprocessing
- B) Training the network by updating weights
- C) Feature extraction
- D) Data augmentation

12. Tokenization in NLP refers to:

- A) Translating text to another language
- B) Converting text into individual words or phrases
- C) Generating text summaries
- D) Classifying text into categories

13. Which model is used for predicting the next word in a sequence?

- A) Decision Tree
- B) Support Vector Machine
- C) Hidden Markov Model
- D) Language Model

14. Sentiment analysis aims to:

- A) Translate text

- B) Summarize text
- C) Determine the emotional tone of text
- D) Recognize named entities in text

15. **The process of converting an image into numerical data is called:**

- A) Image segmentation
- B) Feature extraction
- C) Image recognition
- D) Image digitization

16. **Which neural network architecture is commonly used for object detection in images?**

- A) Recurrent Neural Network
- B) Generative Adversarial Network
- C) Convolutional Neural Network
- D) Feedforward Neural Network

17. **Which technique is used to identify and locate objects within an image?**

- A) Image classification
- B) Object detection
- C) Image segmentation
- D) Feature extraction

18. **In reinforcement learning, the agent learns by:**

- A) Observing expert demonstrations
- B) Using labeled training data
- C) Receiving rewards or penalties from the environment
- D) Applying heuristics

19. **A Markov decision process (MDP) is characterized by:**

- A) States, actions, rewards, and transition probabilities
- B) Input, output, and weights
- C) Clusters, centroids, and distances
- D) Nodes, edges, and labels

20. **Q-learning is a type of:**

- A) Supervised learning
- B) Unsupervised learning
- C) Reinforcement learning
- D) Semi-supervised learning

21. **Which issue is a major ethical concern in AI?**

- A) Algorithm complexity
- B) Data storage
- C) Bias and fairness
- D) Network latency

22. **AI systems can potentially lead to job displacement. This concern falls under:**

- A) Technological advancements
- B) Economic impact
- C) Privacy issues
- D) Data security

23. **Ensuring AI systems are transparent and explainable is important for:**

- A) Improving system efficiency
- B) Gaining public trust
- C) Reducing hardware costs
- D) Enhancing data storage

24. **The first step in an AI project is to:**

- A) Train the model
- B) Collect and preprocess data
- C) Deploy the system
- D) Evaluate the model

25. **What does AI primarily aim to do?**

- A) Simulate human intelligence
- B) Simulate animal behavior
- C) Automate simple tasks
- D) Increase data storage capacity

26. **Which of the following is NOT a subfield of AI?**

- A) Machine Learning
- B) Natural Language Processing
- C) Quantum Computing
- D) Computer Vision

27. **The Turing Test was proposed to test a machine's ability to exhibit:**

- A) Memory capacity
- B) Logical reasoning
- C) Human-like intelligence
- D) Speed of computation

28. **Which of the following is a current application of AI in healthcare?**

- A) Virtual reality
- B) Autonomous driving
- C) Disease diagnosis
- D) Social media management

29. **AI is extensively used in finance for:**

- A) Data entry
- B) Fraud detection
- C) Graphic design

- D) Customer service training

30. Which of these is a popular AI trend in personal devices?

- A) Voice assistants
- B) Email marketing
- C) Hardware encryption
- D) Textile manufacturing

31. What is the first step in image processing?

- A) Object recognition
- B) Image digitization
- C) Feature extraction
- D) Convolution

32. Which of the following is used to reduce noise in an image?

- A) Edge detection
- B) Histogram equalization
- C) Smoothing filter
- D) Segmentation

33. What does the term 'pixel' stand for in image processing?

- A) Picture element
- B) Picture excellence
- C) Pixel element
- D) Pixel experiment

34. Which technique is used to enhance the contrast of an image?

- A) Blurring
- B) Edge detection
- C) Histogram equalization
- D) Thresholding

35. Which algorithm is commonly used for edge detection in images?

- A) K-means
- B) Canny
- C) Backpropagation
- D) AdaBoost

36. Feature detection in images involves identifying:

- A) Specific patterns or structures
- B) The overall brightness
- C) The color distribution
- D) The image size

37. What is the purpose of the HOG (Histogram of Oriented Gradients) descriptor?

- A) Image segmentation
- B) Feature detection
- C) Color correction
- D) Noise reduction

38. Which method is used for matching feature points between two images?

- A) Convolution
- B) SIFT (Scale-Invariant Feature Transform)
- C) Pooling
- D) Data augmentation

39. What is the primary purpose of a convolutional layer in a CNN?

- A) To reduce the image size
- B) To detect features such as edges and textures
- C) To convert the image to grayscale
- D) To label the image

40. Pooling layers in CNNs are used to:

- A) Increase the resolution of the image
- B) Reduce the spatial dimensions of the feature maps
- C) Add more features to the image
- D) Normalize the image data

41. Which activation function is commonly used in CNNs to introduce non-linearity?

- A) Sigmoid
- B) ReLU (Rectified Linear Unit)
- C) Tanh
- D) Softmax

42. In a CNN, which layer is typically used to generate the final output labels for classification tasks?

- A) Convolutional layer
- B) Pooling layer
- C) Fully connected layer
- D) Batch normalization layer

43. Image classification involves:

- A) Detecting objects within an image
- B) Assigning a label to the entire image
- C) Segmenting an image into regions
- D) Enhancing the image quality

44. Which of the following is an example of an object detection algorithm?

- A) ResNet
- B) YOLO (You Only Look Once)
- C) VGGNet
- D) LeNet

45. **Face recognition systems typically use which of the following techniques?**

- A) Edge detection
- B) Facial feature extraction and matching
- C) Color segmentation
- D) Image enhancement

46. **Which CNN architecture is known for its performance in image classification tasks?**

- A) LSTM
- B) AlexNet
- C) GAN
- D) Transformer

47. **In object detection, what does the term "IoU" stand for?**

- A) Input over Utilization
- B) Intersection over Union
- C) Image over Uncertainty
- D) Integration of Units

48. **A common application of CNNs in healthcare is:**

- A) Predicting patient admission rates
- B) Classifying medical images for diagnosis
- C) Scheduling medical staff
- D) Managing patient records

49. **Which technique can improve the performance of a face recognition system?**

- A) Data augmentation
- B) Image compression
- C) Grayscale conversion
- D) Data shuffling

50. **Which of the following is a supervised learning task?**

- A) Clustering
- B) Dimensionality reduction
- C) Regression
- D) Association rule learning

51. **In classification tasks, the target variable is:**

- A) Continuous
- B) Discrete
- C) Binary only
- D) Unsupervised

52. **Which algorithm is commonly used for linear regression?**

- A) K-means
- B) Linear regression
- C) Decision tree

- D) Apriori

53. **The purpose of a confusion matrix is to:**

- A) Measure the correlation between variables
- B) Summarize the performance of a classification model
- C) Reduce the dimensionality of data
- D) Cluster similar data points

54. **Which technique is used for clustering?**

- A) PCA (Principal Component Analysis)
- B) K-means
- C) Linear regression
- D) Logistic regression

55. **The goal of dimensionality reduction is to:**

- A) Increase the number of features
- B) Decrease the number of features
- C) Cluster data points
- D) Predict continuous values

56. **Which method is used for dimensionality reduction?**

- A) Hierarchical clustering
- B) K-means
- C) Principal Component Analysis (PCA)
- D) Naive Bayes

57. **What is the main difference between supervised and unsupervised learning?**

- A) Supervised learning uses labeled data, while unsupervised learning uses unlabeled data
- B) Supervised learning is used for clustering, while unsupervised learning is used for regression
- C) Supervised learning reduces dimensionality, while unsupervised learning does not
- D) Supervised learning is always more accurate than unsupervised learning

58. **Which optimization algorithm is commonly used to minimize the loss function in neural networks?**

- A) K-means
- B) Gradient Descent
- C) Apriori
- D) Naive Bayes

59. **Batch normalization is used to:**

- A) Increase the learning rate
- B) Normalize the input layer by adjusting and scaling the activations
- C) Reduce the number of neurons
- D) Perform clustering

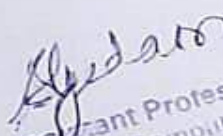
60. **Which technique is used to prevent overfitting in a machine learning model?**

- A) Increasing the number of features

- B) Reducing the training data
- C) Early stopping
- D) Increasing the learning rate

### Grading Scheme

Marks	-	Grade
91-100	-	O
81-90	-	A+
71- 80	-	A
61-70	-	B+
51-60	-	B
46-50	-	C

  
Assistant Professor  
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## MARK-SHEET

SSES Amravati's Science College, Congress Nagar, Nagpur-12

DEPARTMENT OF COMPUTER SCIENCE

Course Title: Certificate Course in Artificial Intelligence

Course Coordinator : Dr. Mrs. Shilpa R. Gedam

### Marksheet


Date: 02-11-2022


Sr. No	Name of Student	Theory(60)	Practical(40)	Total (100)	Grade
1	ANUJA J NAGRIKAR	49	36	85	A <sup>+</sup>
2	KHUSHI K AKRE	56	30	86	A <sup>+</sup>
3	MUGDHA R DAKHOLE	53	30	83	A <sup>+</sup>
4	APARAJITA A BISWAS	39	32	71	A
5	FALGUNI A SINGALWAR	35	39	74	A
6	PRINCY GUPTA	36	37	73	A
7	SANIKA KASHIKAR	57	34	91	O
8	SANIKA CHOUDHARI	39	34	73	A
9	SANJANALENDE	57	30	87	A <sup>+</sup>
10	ABHISAKTI GHUGAL	58	34	92	O
11	AJINKYA INGLE	37	32	69	B <sup>+</sup>
12	ARPIT BANGRE	50	40	90	A <sup>+</sup>
13	HARSHIT MOURYA	35	32	67	B <sup>+</sup>
14	HITESH FULMALI	59	35	94	O
15	HTRUSHIKESH BATWE	53	31	84	A <sup>+</sup>
16	MAHENDRA DWANGAN	58	32	90	A <sup>+</sup>
17	MANDAR SULAKHE	55	40	95	O
18	SARVESH DAWARE	59	32	91	O
19	UJJWAL MNKAR	38	40	78	A
20	VINAY HULKE	45	36	81	A <sup>+</sup>

21	VRUDDHI NIRANJANE	58	34	92	O
22	AYESHA A SIDDIQUE	51	30	81	A <sup>+</sup>
23	AGILESH J IYER	40	33	73	A
24	AKSHATA S JADHAV	48	31	79	A
25	AKSHAYA R IYER	36	31	67	B <sup>+</sup>
26	ANJALI JAISWAL	57	38	95	O
27	ARYA G KADU	44	40	84	A <sup>+</sup>
28	ASTHA KADU	40	32	72	A
29	BHUSHAN P MOURYA	35	40	75	A
30	DIYASHRI S GAJBHIYE	58	33	91	O
31	EKTA V SANT	60	37	97	O
32	GEEANJALI P JATGADE	44	39	83	A <sup>+</sup>
33	GOURI A DOIFODE	44	39	83	A <sup>+</sup>
34	GUNJAN V MOURYA	57	39	96	O
35	ISHIKA S NAIK	59	31	90	A <sup>+</sup>
36	ISHITA S SHRIVASTAVA	57	40	97	O
37	JANHAVI P DIWAKAR	46	37	83	A <sup>+</sup>
38	JAYANT J HALDAR	45	30	75	A
39	JYOTI D CHAVAN	57	33	90	A <sup>+</sup>
40	KALYANI M NAGAPURE	51	34	85	A <sup>+</sup>
41	KIRAN RAO	42	40	82	A <sup>+</sup>
42	MADHURA M PATHAK	60	34	94	O
43	NANDINI A PASI	39	31	70	B <sup>+</sup>
44	OSHEEN D ARORA	44	33	77	A
45	PARMITA S DESHBHRATAR	48	36	84	A <sup>+</sup>
46	PARTH S VIRKHARE	37	35	72	A
47	PRANALI S PORCHATTIWAR	53	38	91	O
48	RAJAT B TIWARI	51	38	89	A <sup>+</sup>

49	RIDDHI C KOTAD	46	36	82	A <sup>+</sup>
50	RIYA R SINGH	54	33	87	A <sup>+</sup>
51	ROHAN K NIMJE	35	33	68	B <sup>+</sup>
52	ROMIT R CHAUDHARY	35	34	69	B <sup>+</sup>
53	SHREYA N DHOKWAL	39	36	75	A
54	SUDHANSHU SAKARE	56	38	94	O
55	SWETH A PIMPALKAR	52	36	88	A <sup>+</sup>
56	TANMAY K KARANJEKAR	56	31	87	A <sup>+</sup>
57	TANMAY P NAGRALE	41	38	79	A
58	TANUJA K SHINDE	48	36	84	A <sup>+</sup>
59	TANUSHKA A KADU	58	38	96	O
60	VISHAKA M KHANI	53	34	87	A <sup>+</sup>
61	DIPIKA SHRIPAD	38	32	70	B <sup>+</sup>
62	RAVINA KAMBLE	36	34	70	B <sup>+</sup>
63	MANSI HEDAOO	39	35	74	A
64	ISHIKA ZARBADE	Ab	40	Ab	Absent
65	KALYANI RAMTEKE	48	34	82	A <sup>+</sup>
66	YASHPREET SINGH	35	34	69	B <sup>+</sup>
67	PIYUSH MESHRAM	56	32	88	A <sup>+</sup>
68	NEHA MAHORE	46	39	85	A <sup>+</sup>
69	NIKITA MATE	56	33	89	A <sup>+</sup>
70	PRAGATI SINGH	44	36	80	A
71	JAY CHIREKAR	60	31	91	O
72	PURVA LANDGE	53	36	89	A <sup>+</sup>
73	ABHINAV GOTMARE	60	38	98	O
74	VIBHANSHA PATIL	59	36	95	O
75	AVINASH TAKOTE	52	32	84	A <sup>+</sup>
76	SAKSHI RUNGHE	49	37	86	A <sup>+</sup>

77	VAIBHAV KAKDE	42	37	79	A
78	SAYALI KHANKE	54	30	84	A <sup>+</sup>
79	VINAY GAWANDE	41	33	74	A
80	SHRUTI HULKE	57	Ab	Ab	Absent
81	AKSHADA GIRHE	49	37	86	A <sup>+</sup>
82	SONAM CHHAWARE	58	34	92	O
83	RINKU HATTEWAR	51	33	84	A <sup>+</sup>
84	SAKSHI PURSWAMI	43	38	81	A <sup>+</sup>
85	VIDNYANI UMATHE	57	32	89	A <sup>+</sup>
86	DIVYANSHU CHOUKSEY	42	37	79	A
87	OM MANGLE	59	31	90	A <sup>+</sup>

  
 Course Coordinator  
 Dr. S. Gedam  
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 Department of Computer Science  
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 Professor & Head  
 Department of Computer Science  
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 Congress Nagar, Nagpur

# OMR Sheet Sample



Shri Shivaji Education Society, Amravati's

# SCIENCE COLLEGE

Congress Nagar, Nagpur-12 (M.S.), India



Accredited with CGPA of 3.51 at 'A+' grade by NAAC, Bangalore  
A "College with Potential for Excellence" identified by UGC New Delhi.

Institutional Member of APQN

Recognized Centre for Higher Learning and Research  
Mentor College under 'PARAMARSH Scheme', UGC, New Delhi

## Add-on Course

Course Exam Name: Certificate Course in Artificial Intelligence

Name of Student:

Roll No.:

Session: 2022-23

Test Date: 28/10/2022

Max. Marks: 60

Invigilator Signature

Obtained Marks:

### INSTRUCTIONS FOR FILLING THE SHEET

1. This sheet should not be folded or crushed.
2. Use only blue/ black ball point pen to fill the circles.
3. Use of pencil is strictly prohibited.
4. Circles should be darkened completely and properly.
5. Cutting and erasing on this sheet is not allowed.
6. Do not use any stray marks on the sheet.
7. Do not use marker or white fluid to hide the mark.

### WRONG METHODS



### CORRECT METHOD



1	A B C D	11	A B C D	21	A B C D	31	A B C D	41	A B C D	51	A B C D
2	○ ○ ○ ○	12	○ ○ ○ ○	22	○ ○ ○ ○	32	○ ○ ○ ○	42	○ ○ ○ ○	52	○ ○ ○ ○
3	○ ○ ○ ○	13	○ ○ ○ ○	23	○ ○ ○ ○	33	○ ○ ○ ○	43	○ ○ ○ ○	53	○ ○ ○ ○
4	○ ○ ○ ○	14	○ ○ ○ ○	24	○ ○ ○ ○	34	○ ○ ○ ○	44	○ ○ ○ ○	54	○ ○ ○ ○
5	○ ○ ○ ○	15	○ ○ ○ ○	25	○ ○ ○ ○	35	○ ○ ○ ○	45	○ ○ ○ ○	55	○ ○ ○ ○
6	○ ○ ○ ○	16	○ ○ ○ ○	26	○ ○ ○ ○	36	○ ○ ○ ○	46	○ ○ ○ ○	56	○ ○ ○ ○
7	○ ○ ○ ○	17	○ ○ ○ ○	27	○ ○ ○ ○	37	○ ○ ○ ○	47	○ ○ ○ ○	57	○ ○ ○ ○
8	○ ○ ○ ○	18	○ ○ ○ ○	28	○ ○ ○ ○	38	○ ○ ○ ○	48	○ ○ ○ ○	58	○ ○ ○ ○
9	○ ○ ○ ○	19	○ ○ ○ ○	29	○ ○ ○ ○	39	○ ○ ○ ○	49	○ ○ ○ ○	59	○ ○ ○ ○
10	○ ○ ○ ○	20	○ ○ ○ ○	30	○ ○ ○ ○	40	○ ○ ○ ○	50	○ ○ ○ ○	60	○ ○ ○ ○

# Answer Key



## Shri Shivaji Education Society, Amravati's **SCIENCE COLLEGE** Congress Nagar, Nagpur-12 (M.S.), India



Accredited with CGPA of 3.51 at 'A+' grade by NAAC, Bangalore  
A "College with Potential for Excellence" identified by UGC New Delhi.  
Institutional Member of APQN  
Recognized Centre for Higher Learning and Research  
Mentor College under 'PARAMARSH Scheme', UGC, New Delhi

<b>Add-on Course</b>			
<b>Course Exam Name: Certificate Course in Artificial Intelligence</b>			
<b>Name of Student:</b>		<b>INSTRUCTIONS FOR FILLING THE SHEET</b> 1. This sheet should not be folded or crushed. 2. Use only blue/ black ball point pen to fill the circles. 3. Use of pencil is strictly prohibited. 4. Circles should be darkened completely and properly. 5. Cutting and erasing on this sheet is not allowed. 6. Do not use any stray marks on the sheet. 7. Do not use marker or white fluid to hide the mark. <b>WRONG METHODS</b> <b>CORRECT METHOD</b>	
<b>Roll No.:</b>			
<b>Session: 2022-23</b>			
<b>Test Date: 28/10/2022</b>	<b>Max. Marks: 60</b>		
<b>Invigilator Signature</b>		<b>Obtained Marks:</b>	<div style="border: 1px solid black; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center;"> </div>

A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D						
1	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	11	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	21	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	31	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	41	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	51	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	12	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	22	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	32	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	42	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	52	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	13	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	23	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	33	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	43	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	53	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	14	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	24	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	34	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	44	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	54	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	15	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	25	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	35	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	45	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	55	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
6	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	16	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	26	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	36	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	46	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	56	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
7	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	17	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	27	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	37	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	47	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	57	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	18	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	28	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	38	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	48	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	58	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
9	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	19	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	29	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	39	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	49	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	59	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
10	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	20	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	30	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	40	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	50	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	60	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

## Solved OMR Sheet of Student



**Shri Shivaji Education Society, Amravati's**  
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 Mentor College under 'PARAMARSH Scheme', UGC, New Delhi

### Add-on Course

**Course Exam Name: Certificate Course in Artificial Intelligence**

**Name of Student:**

*Sakshi Runghe*

**Roll No.:**

*AI-76*

**Session: 2022-23**

**Test Date: 28/10/2022**

**Max. Marks: 60**

**Invigilator Signature**

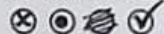
**Obtained Marks:**

*49*

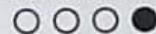
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6. Do not use any stray marks on the sheet.
7. Do not use marker or white fluid to hide the mark.

#### WRONG METHODS



#### CORRECT METHOD



A B C D				A B C D				A B C D				A B C D				A B C D				A B C D									
1	○	○	○	✓	11	○	○	○	✓	21	○	○	○	✓	31	○	○	○	✓	41	○	○	○	✓	51	○	○	○	✓
2	○	○	○	✗	12	○	○	○	✗	22	○	○	○	✗	32	○	○	○	✓	42	○	○	○	✓	52	○	○	○	✓
3	○	○	○	✗	13	○	○	○	✓	23	○	○	○	✗	33	○	○	○	✓	43	○	○	○	✓	53	○	○	○	✓
4	○	○	○	✗	14	○	○	○	✓	24	○	○	○	✗	34	○	○	○	✓	44	○	○	○	✓	54	○	○	○	✓
5	○	○	○	✓	15	○	○	○	✓	25	○	○	○	✓	35	○	○	○	✓	45	○	○	○	✓	55	○	○	○	✓
6	○	○	○	✓	16	○	○	○	✓	26	○	○	○	✓	36	○	○	○	✓	46	○	○	○	✓	56	○	○	○	✓
7	○	○	○	✓	17	○	○	○	✓	27	○	○	○	✓	37	○	○	○	✓	47	○	○	○	✓	57	○	○	○	✓
8	○	○	○	✓	18	○	○	○	✓	28	○	○	○	✓	38	○	○	○	✗	48	○	○	○	✓	58	○	○	○	✓
9	○	○	○	✓	19	○	○	○	✓	29	○	○	○	✓	39	○	○	○	✗	49	○	○	○	✓	59	○	○	○	✓
10	○	○	○	✓	20	○	○	○	✓	30	○	○	○	✓	40	○	○	○	✗	50	○	○	○	✓	60	○	○	○	✓

## Certificate of Student



**Action Taken:**

A free Add-On Course for UG students in the Department of Computer Science, Shri Shivaji Education Society Amravati's Science College, Congress Nagar, Nagpur was held from 16th August 2022 to 22nd October 2022. The course title was "Artificial Intelligence". 85 students appeared and passed in both theory and practical examination. The result was prepared and certificates were distributed to the students.

**Shri Shivaji Education Society Amravati's Science College,  
Congress Nagar, Nagpur**

**Add on Course in Artificial Intelligence Feedback Form**

Name of Student.....

Please rate the following aspects of the program on a scale from 1 to 5, with

1. Best	2. Excellent	3. Good	4. Satisfactory	5. Fair
---------	--------------	---------	-----------------	---------

**Q.1** How would you rate the organization and structure of the course?

1	2	3	4	5
---	---	---	---	---

**Q.2** How do you rate the quality of the delivery of the units by the Teacher?

1	2	3	4	5
---	---	---	---	---

**Q.3** How useful were the hands-on assignments and projects in enhancing your practical understanding of Artificial Intelligence?

1	2	3	4	5
---	---	---	---	---

**Q.4** How well-organized was the course structure, including the sequencing of topics and the pacing of the material?

1	2	3	4	5
---	---	---	---	---

**Q.5** Overall, how would you rate your learning experience in this course?

1	2	3	4	5
---	---	---	---	---

**Q.6 Any Suggestions:**

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---

## Feedback Analysis

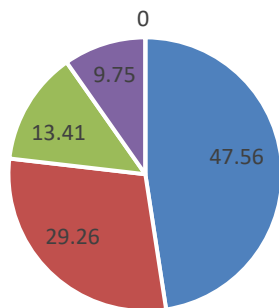
1. Number of Students Registered for the Course : 87
2. Number of Students submitted the Feedback : 82
3. Question wise analysis of the Feedback:

Sr. No	Question	Responses in Percentage (%)				
		Best	Excellent	Good	Satisfactory	Fair
1)	How would you rate the organization and structure of the course?	47.56	29.26	13.41	9.75	0
2)	How do you rate the quality of the delivery of the units by the Teacher?	37.8	32.92	14.63	10.97	3.65
3)	How useful were the hands-on assignments and projects in enhancing your practical understanding of AI ?	35.36	32.92	21.95	8.53	1.21
4)	How well-organized was the course structure, including the sequencing of topics and the pacing of the material?	41.46	31.7	17.07	9.75	0
5)	Overall, how would you rate your learning experience in this course?	45.12	28.04	18.29	8.53	0
6)	Any Suggestions	No Suggestions: 28.7% Remaining Comments: Good Course, Nice Course, Change the timing of Classes				

Remark: Students commented that the course will be useful in professional life.  
Department will keep on improving the quality of the course.

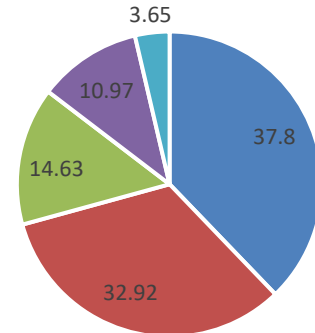
Certificate course: Artificial Intelligence (2022-23)  
Feedback Analysis

Q.1 How would you rate the organization and structure of the course?



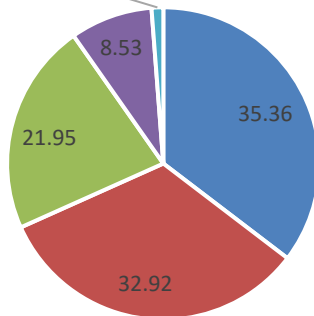
■ Best ■ Excellent ■ Good ■ Satisfactory ■ Fair

Q. 2 How do you rate the quality of the delivery of the units by the Teacher?



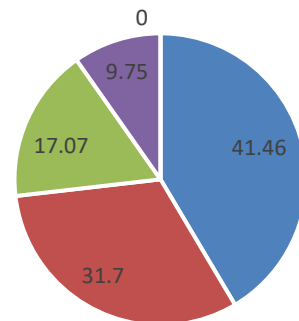
■ Best ■ Excellent ■ Good ■ Satisfactory ■ Fair

Q. 3 How useful were the hands-on assignments and projects in enhancing your practical understanding of AI ?



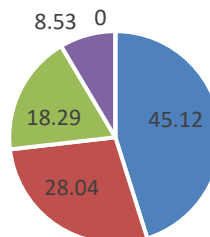
■ Best ■ Excellent ■ Good ■ Satisfactory ■ Fair

Q. 4 How well-organized was the course structure, including the sequencing of topics and the pacing of the material?



■ Best ■ Excellent ■ Good ■ Satisfactory ■ Fair

Q.5 Overall, how would you rate your learning experience in this course?



■ Best ■ Excellent ■ Good ■ Satisfactory ■ Fair