

ROLL NUMBER				
----------------	--	--	--	--

SET	A
-----	---



**INDIAN SCHOOL MUSCAT
FIRST PRE BOARD EXAMINATION 2023
ARTIFICIAL INTELLIGENCE (417)**



CLASS : X
DATE: 06-12-2023

TIME ALLOTTED : 2 HRS.
MAXIMUM MARKS: 50

GENERAL INSTRUCTIONS:

1. Please read the instructions carefully.
2. This Question Paper consists of **21 Questions** in two sections: **Section A & Section B.**
3. Section A has Objective type questions whereas Section B contains Subjective type questions.
4. **Out of the given (5+16=) 21 questions, a candidate has to answer (5+10=) 15 questions in the allotted (maximum) time of 2 hours.**
5. All questions of a particular section must be attempted in the correct order.
6. **SECTION A – OBJECTIVE TYPE QUESTIONS (24 MARKS):**
 - i. This section has 05 questions.
 - ii. Marks allotted are mentioned against each question/part.
 - iii. There is no negative marking.
 - iv. Do as per the instructions given.
7. **SECTION B – SUBJECTIVE TYPE QUESTIONS (26 MARKS):**
 - i. This section has 16 questions.
 - ii. A candidate has to do 10 questions.
 - iii. Do as per the instructions given.
 - iv. Marks allotted are mentioned against each question/part.

SECTION A – OBJECTIVE TYPE QUESTIONS

Q. 1 Answer any 4 out of the given 6 questions on Employability Skills (1x 4= 4 marks)

- i. Rahul gets feedback on his project work from his class teacher. Which of these options demonstrates positive attitude in this situation?

1

Ravi

- (a) Rahul ignores the feedback.
 (b) Rahul takes the feedback but does not use it.
 (c) Rahul tells others that the teacher is wrong.
 (d) Rahul learns from the feedback and makes his project work better.
- ii. Which of the following is a symptom of a computer virus? 1
 (a) Computer runs faster than normal
 (b) Computer tends to restart on its own
 (c) Space on the disk is increased.
 (d) All of the above
- iii. Sheela decides to sell her company tyres in Sri Lanka. It does not sell and she has a loss. She 1
 apologizes to the people who work for her. She says she will plan better next time.
 She.....
 (a) takes responsibility for her mistakes
 (b) thinks before making a decision
 (c) does not give up
 (d) is creative
- iv. **Select the correct option for the function that the entrepreneur is doing.** 1
 Ali has a diamond factory. He pays his employees on the 1st of every month.
 (a) Creates a new product
 (b) Manages the business
 (c) Takes risk
 (d) Innovation
- v. Riyanshi gets up at 5 am and goes to her badminton classes. Then she comes home and 1
 finishes her homework before going to school. She does this all by herself. No one tells her to
 do it. This is an example of _____
 a) External motivation
 b) Both self and external motivation
 c) Self-motivation
 d) Not any specific type of motivation
- vi. Which of the following is NOT an element of communication within the communication 1
 process cycle?
 (a) Channel
 (b) Receiver
 (c) Sender
 (d) Time

Q.2 Answer any 5 out of the given 6 questions (1x 5= 5 marks)

- i. Identify the following SDG.
 a) Reduced Inequalities
 b) Gender Equality
 c) Peace & Justice
 d) Partnership for Goals



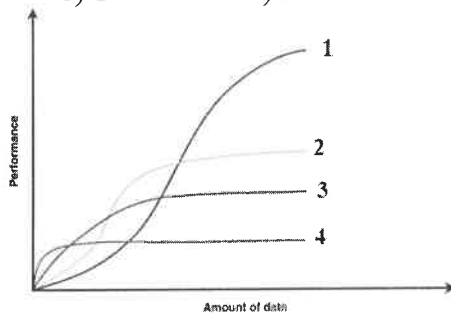
Handwritten signature or mark.

- ii. _____ is number of pixels in an image. 1
- Grayscale
 - RGB
 - Resolution
 - Pixel value
- iii. _____ is a concept to unify statistics, data analysis, machine learning and their related methods in order to understand and analyze actual phenomena with data. 1
- Neural networks
 - Data Science
 - Compute Vision
 - Natural Language Processing
- iv. Write the formula for Accuracy. 1
- v. Choose the correct statement related to Machine Learning. 1
- Statement 1: It is a subset of AI which enables machines to improve at tasks with experience.
Statement 2: It enables machines to learn by themselves using the provided data and make accurate predictions/decisions.
- Both Statements 1 and 2 are correct.
 - Only Statement 1 is correct.
 - Only Statement 2 is correct.
 - Both Statements 1 and 2 are incorrect.
- vi. The F1 score for an AI model would be an ideal 1 (100%), if _____. 1

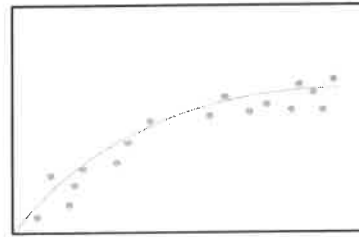
Q.3 Answer any 5 out of the given 6 questions (1x 5= 5 marks)

- i. Name any two data collection sources. 1
- ii. Problem scoping is the stage where 1
- models are created.
 - the problem is solved.
 - the data representing the problem is collected.
 - the problem can be identified and goals can be set.
- iii. Prerna is undertaking a project about Deep Neural networks. Help her to identify which of the following graph trends depicts a Large Neural network? 1

- a) 3 b) 4 c) 1 d) 2



- iv. _____ is especially relevant when used to provide an overview of a news item or blog post, while avoiding redundancy from multiple sources and maximizing the diversity of content obtained. 1
- v. Which of the following is an application of Data Science? 1
- Face locks in smartphones
 - Website recommendations
 - Email filters
 - Self driving cars
- vi. Identify the algorithm based on the given graph. 1
- Dimensionality reduction
 - Classification
 - Clustering
 - Regression



Q.4 Answer any 5 out of the given 6 questions (1x 5= 5 marks)

- i. What are the three channels in a coloured image? 1
- ii. Jashwanth was studying about NLP. He wanted to know the term about a technique used to extract the base form of the words by removing affixes from them. Help him in identifying the term used for it. 1
- iii. A company uses AI device that uses an algorithm which prefers male candidates over female ones. This is an example of 1
- AI Access
 - AI ethics
 - AI Bias
 - AI logic
- iv. Consider the following options in the confusion matrix 1
- True Positive
 - False Positive
 - True Negative
 - False Negative
- Which are the options where prediction matches with reality?
- v. **Assertion (A):** Despite AI's promises to bring forth new opportunities, there are certain associated risks that need to be mitigated appropriately and effectively. To give a better perspective, the ecosystem and the socio-technical environment in which the AI systems are embedded needs to be more trustworthy. 1
- Reason (R):** There are multiple ethical concerns related to AI like AI for kids, AI Bias, AI Access etc.
- Only A is true.

22

- b) Only R is true.
- c) Both A and R are true and R is the correct explanation of A.
- d) Both A and R are true but R is not the correct explanation of A.

- vi. The result of comparison between the prediction and reality can be recorded in what we call the _____. 1
- a. Overfitting
 - b. Problem Scoping
 - c. Data acquisition
 - d. Confusion Matrix

Q.5 Answer any 5 out of the given 6 questions (1x 5= 5 marks)

- i. _____ makes it possible to assign predefined categories to a document and organize it to help you find the information you need or simplify some activities. 1
- a. Automatic Summarization
 - b. Text Classification
 - c. Sentiment Analysis
 - d. Text normalization
- ii. What do you mean by pixel value? 1
- iii. Which of the following parameters involve fraction of positive cases that are correctly identified? (a) Accuracy (b) Precision (c) Recall (d) F1 score 1
- iv. Identify the type of chatbot with the information given below: These bots are free and are easy to integrate to a messaging platform and little language processing skills required. 1
- v. Tanvi is an excellent in her writing skills and debate. She has won many interschool competitions. Which type of intelligence does she demonstrate? 1
- vi. What are stopwords in text normalization ? 1

SECTION B – SUBJECTIVE TYPE QUESTIONS

Answer any 3 out of the given 5 questions on Employability Skills (2 x 3 = 6 marks). Answer each question in 20 – 30 words.

- Q. 6 List any two differences between interests and abilities. 2
- Q. 7 Sita wants to protect her computer data from virus and theft. Name any 4 measures that she should take. 2
- Q. 8 Explain any two SDGs. 2
- Q. 9 What is the role and significance of an entrepreneur ? (Any four). 2
- Q. 10 What do you mean by visual communication? Give any two examples. 2

20

Answer any 4 out of the given 6 questions in 20- 30 words each (2 x4 = 8 marks)

- Q. 11 What do we get from the Bag of Words algorithm? Explain the steps. 2
- Q.12 Explain the tasks used in Computer vision application for multiple objects 2
- Q.13 What is meant by a corpus in NLP? Define the term sentiment analysis. 2
- Q.14 Explain the difference between lemmatization and stemming with an example. 2
- Q.15 Explain the two types of Unsupervised learning models. 2
- Q.16 Explain the difference between underfit and overfit. 2

Answer any 3 out of the given 5 questions in 50- 80 words each (4 x3 = 12 marks)

- Q.17 Explain how neural networks work in an AI model and mention any three features of Neural Networks. 4
- Q.18 Explain the 4W canvas and problem statement template. 4
- Q.19 Explain a) Kineasthetic intelligence b) Existential intelligence
c) Spatial visual intelligence d) Intrapersonal Intelligence 4
- Q.20 Explain the steps in Text normalization procedure. 4
- Q.21 The Disaster Management Department of Andhra Pradesh government got a Tsunami prediction AI model developed. The model predicts the occurrence of a tsunami so that the state can be better equipped for handling it. During testing, the AI model came up with the following predictions. 4

Confusion Matrix		Reality	
		Yes	No
Predicted	Yes	60	25
	No	05	10

- a) How many wrong predictions have been performed in the above scenario?
- b) Calculate precision, recall and F1 Score.

******END OF THE QUESTION PAPER******

ROLL NUMBER				
----------------	--	--	--	--

SET	B
-----	---



**INDIAN SCHOOL MUSCAT
FIRST PRE BOARD EXAMINATION 2023
ARTIFICIAL INTELLIGENCE (417)**



CLASS : X
DATE: 09-12-2023

TIME ALLOTTED : 2 HRS.
MAXIMUM MARKS: 50

GENERAL INSTRUCTIONS:

1. Please read the instructions carefully.
2. This Question Paper consists of **21 Questions** in two sections: **Section A & Section B.**
3. Section A has Objective type questions whereas Section B contains Subjective type questions.
4. **Out of the given (5+16=) 21 questions, a candidate has to answer (5+10=) 15 questions in the allotted (maximum) time of 2 hours.**
5. All questions of a particular section must be attempted in the correct order.
6. **SECTION A – OBJECTIVE TYPE QUESTIONS (24 MARKS):**
 - i. This section has 05 questions.
 - ii. Marks allotted are mentioned against each question/part.
 - iii. There is no negative marking.
 - iv. Do as per the instructions given.
7. **SECTION B – SUBJECTIVE TYPE QUESTIONS (26 MARKS):**
 - i. This section has 16 questions.
 - ii. A candidate has to do 10 questions.
 - iii. Do as per the instructions given.
 - iv. Marks allotted are mentioned against each question/part.

SECTION A – OBJECTIVE TYPE QUESTIONS

Q. 1 Answer any 4 out of the given 6 questions on Employability Skills (1x 4= 4 marks)

- i. You need to apply leave at work. Which method of communication will you use?

1


Handwritten signature

- (a) e-mail
- (b) Poster
- (c) Newsletter
- (d) Blog

- ii. Which of the following trap small children into inappropriate relations? 1
- (a) Trojan Horse
 - (b) Worms
 - (c) Online predators
 - (d) Anti-Virus
- iii. Anuj works hard to get the best employee award at the end of year. What type of motivation is this? 1
- (a) Internal
 - (b) External
 - (c) Both internal and external
 - (d) Not any specific type of motivation
- iv. Ravi's customer comes to his store and starts shouting at him. He does not get angry. He listens to what his customer is saying. He is _____. 1
- (a) self confident
 - (b) confident
 - (c) motivating
 - (d) patient
- v. Choose the option which is not a sustainable development goal according to United Nations. 1
- (a) Clean Water and Sanitation
 - (b) Gender Equality
 - (c) Reduced Inequalities
 - (d) Life under Sun
- vi. What makes you complete work or studies without others cheering you? 1
- a. Self-confidence
 - b. Self-motivation
 - c. Communication
 - d. Self-esteem

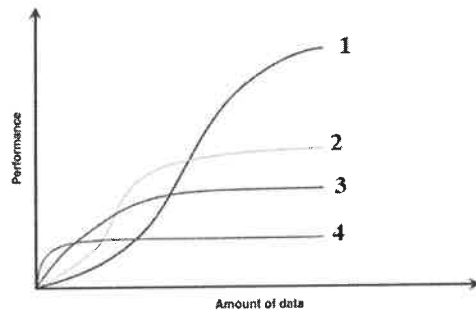
Q.2 Answer any 5 out of the given 6 questions (1x 5= 5 marks)

- i. Choose the correct statement related to Machine Learning. 1
- Statement 1: It is a subset of AI which enables machines to improve at tasks with experience.
- Statement 2: It enables machines to learn by themselves using the provided data and make accurate predictions/decisions.
- a) Only Statement 2 is correct.
 - b) Only Statement 1 is correct.
 - c) Both Statements 1 and 2 are correct.
 - d) Both Statements 1 and 2 are incorrect.

- ii. Identify the following SDG. 1
- a) Decent work and Economic growth
b) Peace, Justice and strong Institutions
c) Responsible consumption and Production
d) Partnership for the Goals
- 
- iii. The F1 score for an AI model would be an ideal 1 (100%), if _____. 1
- iv. Write the formula for Accuracy. 1
- v. _____ is number of pixels in an image. 1
- a) Grayscale
b) Resolution
c) RGB
d) Pixel value
- vi. _____ is a concept to unify statistics, data analysis, machine learning and their related methods in order to understand and analyze actual phenomena with data. 1
- a) Neural networks
b) Data Science
c) Compute Vision
d) Natural Language Processing

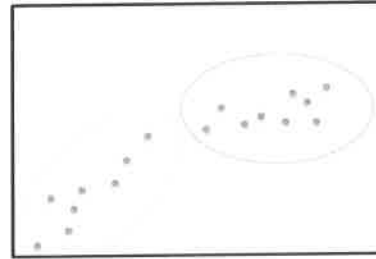
Q.3 Answer any 5 out of the given 6 questions (1x 5= 5 marks)

- i. Problem scoping is the stage where 1
- (a) the AI model is created .
(b) the problem is solved.
(c) data is collected for solving the problem
(d) the problem can be identified and goals can be set .
- ii. Name any two data collection sources. 1
- iii. Which of the following is an application of Data Science? 1
- a) Website recommendations
b) Face locks in smartphones
c) Email filters
d) Self driving cars
- iv. _____ is especially relevant when used to provide an overview of a news item or blog post, while avoiding redundancy from multiple sources and maximizing the diversity of content obtained. 1
- v. Virat is undertaking a project about Deep Neural networks. Help her to identify which of the following graph trends depicts a Large Neural network? 1
- a) 4 b) 3 c) 2 d) 1



vi. Identify the algorithm based on the given graph. 1

- (a) Dimensionality reduction
- (b) Classification
- (c) Clustering
- (d) Regression



Q.4 Answer any 5 out of the given 6 questions (1x 5= 5 marks)

- i. A company uses AI device that uses an algorithm which prefers male candidates over female ones. This is an example of 1
 - a) AI Access
 - b) AI ethics
 - c) AI Bias
 - d) AI logic
- ii. Anuradha was studying about NLP. She wanted to know the term about a technique used to extract the base form of the words by removing affixes from them. Help him in identifying the term used for it. 1
- iii. The result of comparison between the prediction and reality can be recorded in what we call the _____. 1
 - a. Overfitting
 - b. Problem Scoping
 - c. Confusion Matrix
 - d. Data acquisition
- iv. What do you mean by resolution of an image? 1
- v. **Assertion (A):** Despite AI's promises to bring forth new opportunities, there are certain associated risks that need to be mitigated appropriately and effectively. To give a better perspective, the ecosystem and the socio-technical environment in which the AI systems are embedded needs to be more trustworthy. 1
Reason (R): There are multiple ethical concerns related to AI like AI for kids, AI Bias, AI Access etc.
 a) Only A is true.
 b) Only R is true.
 c) Both A and R are true and R is the correct explanation of A.

Raj

d) Both A and R are true but R is not the correct explanation of A.

- vi. Consider the following options in the confusion matrix 1
- 1) True Positive
 - 2) False Positive
 - 3) True Negative
 - 4) False Negative
- Which are the options where prediction matches with reality.

Q.5 Answer any 5 out of the given 6 questions (1x 5= 5 marks)

- i. Which of the following parameters involve fraction of positive cases that are correctly identified? (a) Accuracy (b) Precision (c) Recall (d) F1 score 1
- ii. What is the range of values possible for a pixel (1 byte)? 1
- iii. _____ is especially relevant when used to provide an overview of a news item or blog post, while avoiding redundancy from multiple sources and maximizing the diversity of content obtained. 1
- a. Automatic Summarization
 - b. Sentiment Analysis
 - c. Text Classification
 - d. All of the above
- iv. Identify the type of chatbot with the information given below: These bots are free and are easy to integrate to a messaging platform and little language processing skills required. 1
- v. In _____ Learning, the machine is trained with huge amounts of data which helps it in training itself around the data. 1
- vi. What is a corpus in text normalization ? 1

SECTION B – SUBJECTIVE TYPE QUESTIONS

Answer any 3 out of the given 5 questions on Employability Skills (2 x 3 = 6 marks). Answer each question in 20 – 30 words.

- Q. 6 Explain the SMART method to set the goals in Self management. 2
- Q. 7 Explain a) Virus b) Internet Scams 2
- Q. 8 What do you mean by non verbal communication? Give any two examples. 2
- Q. 9 What is the role and significance of an entrepreneur ? (Any four). 2
- Q. 10 Explain any two SDGs. 2

Answer any 4 out of the given 6 questions in 20- 30 words each (2 x4 = 8 marks)

- Q. 11 What do we get from the Bag of Words algorithm? Explain the steps. 2
- Q.12 Explain the tasks used in Computer vision application for single objects. 2
- Q.13 What is the difference between Text Classification and sentiment analysis. 2
- Q.14 Explain the difference between lemmatization and stemming with example. 2
- Q.15 Explain the two types of Supervised learning models. 2
- Q.16 Explain the difference between underfit and overfit. 2

Answer any 3 out of the given 5 questions in 50- 80 words each (4 x3 = 12 marks)

- Q.17 Explain the steps in AI project cycle. Also explain the problem statement template. 4
- Q.18 Explain the steps in Text normalization procedure. 4
- Q.19 Explain a) Kineasthetic intelligence b) Existential intelligence c) Spatial visual intelligence d) linguistic Intelligence 4
- Q.20 Explain how neural networks work in an AI model and mention any three features of Neural Networks. 4
- Q.21 Wellcare Hopsital has developed an AI model which predicts heart attack risk The model predicts the occurrence of a heart attack so that the doctors can handle it without losing time. During testing, the AI model came up with the following predictions. 4

Confusion Matrix		Reality	
		Yes	No
Predicted	Yes	50	20
	No	10	20

- a) How many correct predictions have been performed in the above scenario?
- b) Calculate Precision, Recall and F1 Score.

******END OF THE QUESTION PAPER******

ROLL NUMBER				
----------------	--	--	--	--

SET	C
-----	---



**INDIAN SCHOOL MUSCAT
FIRST PRE BOARD EXAMINATION 2023
ARTIFICIAL INTELLIGENCE (417)**



CLASS : X
DATE: 09-12-2023

TIME ALLOTTED : 2 HRS.
MAXIMUM MARKS: 50

GENERAL INSTRUCTIONS:

1. Please read the instructions carefully.
2. This Question Paper consists of **21 Questions** in two sections: **Section A & Section B.**
3. Section A has Objective type questions whereas Section B contains Subjective type questions.
4. **Out of the given (5+16=) 21 questions, a candidate has to answer (5+10=) 15 questions in the allotted (maximum) time of 2 hours.**
5. All questions of a particular section must be attempted in the correct order.
6. **SECTION A – OBJECTIVE TYPE QUESTIONS (24 MARKS):**
 - i. This section has 05 questions.
 - ii. Marks allotted are mentioned against each question/part.
 - iii. There is no negative marking.
 - iv. Do as per the instructions given.
7. **SECTION B – SUBJECTIVE TYPE QUESTIONS (26 MARKS):**
 - i. This section has 16 questions.
 - ii. A candidate has to do 10 questions.
 - iii. Do as per the instructions given.
 - iv. Marks allotted are mentioned against each question/part.

SECTION A – OBJECTIVE TYPE QUESTIONS

Q. 1 Answer any 4 out of the given 6 questions on Employability Skills (1x 4= 4 marks)

- i. What does the word SMART stands for– in setting goals ?

1

Handwritten signature

- a. Strategic , Measurable, Achievable, Realistic, Test bound
 b. Strategic , Measurable, Achievable, Relative, Time bound
 c. Specific , Measurable, Achievable, Realistic, Time bound
 d. Specific , Measurable, Achievable, Realistic, Test bound
- ii. A program that appears to be a useful software program but behaves like a virus and destroy data. 1
 (a) Worms
 (b) Online predator
 (c) Anti-Virus
 (d) Trojan Horse
- iii. What makes you complete work or studies without others cheering you? 1
 a. Self-confidence
 b. Communication
 c. Self-motivation
 d. Self-esteem
- iv. Varun's customer comes to his store and starts shouting at him. He does not get angry. He listens to what his customer is saying. He is _____. 1
 (a) hardworking
 (b) confident
 (c) patient
 (d) prying new ideas
- v. Choose the option which is not a sustainable development goal according to United Nations. 1
 (a) Clean Water and Sanitation
 (b) Population goals
 (c) Gender Equality
 (d) Reduced Inequalities
- vi. Arun works hard to get the best student award at the end of year. What type of motivation is this? 1
 (a) Internal
 (b) External
 (c) Both internal and external
 (d) Not any specific type of motivation

Q.2 Answer any 5 out of the given 6 questions (1x 5= 5 marks)

- i. Identify the following SDG. 1
 a) Decent work and Economic growth
 b) Peace, Justice and strong Institutions
 c) Responsible consumption and Production
 d) Partnership for the Goals
- ii. The F1 score for an AI model would be an ideal 1 (100%), if _____. 1
- iii. Choose the correct statement related to Machine Learning. 1



20

Statement 1: It is a subset of AI which enables machines to improve at tasks with experience.
Statement 2: It enables machines to learn by themselves using the provided data and make accurate predictions/decisions.

- a) Both Statements 1 and 2 are correct.
- b) Only Statement 1 is correct.
- c) Only Statement 2 is correct.
- d) Both Statements 1 and 2 are incorrect.

iv. _____ is a concept to unify statistics, data analysis, machine learning and their related methods in order to understand and analyze actual phenomena with data. 1

- a) Neural networks
- b) Compute Vision
- c) Data Science
- d) Natural Language Processing

v. _____ is number of pixels in an image. 1

- a) Grayscale
- b) Resolution
- c) RGB
- d) Pixel value

vi. Write the formula for Accuracy. 1

Q.3 Answer any 5 out of the given 6 questions (1x 5= 5 marks)

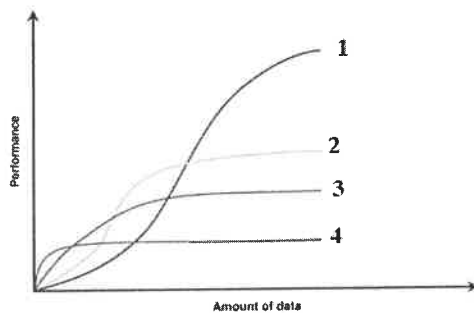
i. Problem scoping is the stage where 1
(a) the problem can be identified and goals can be set
(b) the problem is solved.
(c) data is collected for solving the problem
(d) the AI model is created.

ii. Name any two data collection sources. 1

iii. Which of the following is an application of Data Science? 1
a) Face locks in smartphones
b) Website recommendations
c) Email filters
d) Self driving cars

iv. _____ is especially relevant when used to provide an overview of a news item or blog post, while avoiding redundancy from multiple sources and maximizing the diversity of content obtained. 1

v. Virat is undertaking a project about Deep Neural networks. Help her to identify which of the following graph trends depicts a Large Neural network? 1
a) 1 b) 3 c) 4 d) 2



vi. Identify the algorithm based on the given graph.

- (a) Dimensionality reduction
- (b) Classification
- (c) Clustering
- (d) Regression



1

Q.4 Answer any 5 out of the given 6 questions (1x 5= 5 marks)

- i. What do you mean by resolution of an image? 1
- ii. **Assertion (A):** Despite AI's promises to bring forth new opportunities, there are certain associated risks that need to be mitigated appropriately and effectively. To give a better perspective, the ecosystem and the socio-technical environment in which the AI systems are embedded needs to be more trustworthy. 1
Reason (R): There are multiple ethical concerns related to AI like AI for kids, AI Bias, AI Access etc.
 - a) Only A is true.
 - b) Only R is true.
 - c) Both A and R are true and R is the correct explanation of A.
 - d) Both A and R are true but R is not the correct explanation of A.
- iii. A company uses AI device that uses an algorithm which prefers male candidates over female ones. This is an example of 1
 - a) AI Bias
 - b) AI Access
 - c) AI ethics
 - d) AI logic
- iv. The result of comparison between the prediction and reality can be recorded in what we call the _____. 1
 - a. Overfitting
 - b. Confusion Matrix
 - c. Data acquisition
 - d. Problem Scoping

- v. Anuradha was studying about NLP. She wanted to know the term about a technique used to extract the base form of the words by removing affixes from them. Help him in identifying the term used for it. 1
- vi. Consider the following options in the confusion matrix : 1
- a) True Positive
 - b) False Positive
 - c) True Negative
 - d) False Negative
- Which are the options where prediction does not match with reality?

Q.5 Answer any 5 out of the given 6 questions (1x 5= 5 marks)

- i. _____ makes it possible to assign predefined categories to a document and organize it to help you find the information you need or simplify some activities.. 1
- a. Automatic Summarization
 - b. Sentiment Analysis
 - c. Text Classification
 - d. All of the above
- ii. What do you mean by grayscale image? 1
- iii. _____ takes into account the True Positives and False Positives. 1
- (a) Accuracy
 - (b) Precision
 - (c) Recall
 - (d) F1 score
- iv. Identify the type of chatbot with the information given below: These bots work on bigger databases and other resources directly. 1
- v. Ananya is an excellent Kathak Dancer. She has won many interstate competitions and has been felicitated by many dance schools. Which type of intelligence does she demonstrate? 1
- vi. What is meant by corpus in Text normalization ? 1

SECTION B – SUBJECTIVE TYPE QUESTIONS

Answer any 3 out of the given 5 questions on Employability Skills (2 x 3 = 6 marks). Answer each question in 20 – 30 words.

- Q. 6 Explain the difference between Worms and Trojan horse. 2
- Q. 7 Write any four qualities of self motivated people. 2
- Q. 8 What do you mean by verbal communication? Give any two examples. 2
- Q. 9 What is the role and significance of an entrepreneur ? (Any four). 2
- Q. 10 Explain any two SDGs. 2

Answer any 4 out of the given 6 questions in 20- 30 words each (2 x4 = 8 marks)

- Q. 11 Explain the difference between underfit and overfit. 2
- Q.12 Explain the tasks used in Computer vision application for single objects. 2
- Q.13 What is the difference between Automatic summarization and Text classification. 2
- Q.14 Explain the difference between lemmatization and stemming with an example. 2
- Q.15 Explain the steps in AI project cycle. 2
- Q.16 What do we obtain from Bag of words algorithm in NLP? Explain the steps . 2

Answer any 3 out of the given 5 questions in 50- 80 words each (4 x3 = 12 marks)

- Q.17 Explain a) Intrapersonal intelligence b) linguistic Intelligence 4
c) Spatial visual intelligence d) Existential intelligence
- Q.18 Explain the steps in Text normalization procedure. 4
- Q.19 Explain the different models of Supervised and Unsupervised learning. 4
- Q.20 Explain how neural networks work in an AI model and mention any three features of Neural Networks. 4
- Q.21 The ABC International school has developed a Water shortage prediction AI model. The model predicts the shortage of water so that school can take necessary action to handle it. During testing, the AI model came up with the following predictions. 4

Confusion Matrix		Reality	
		Yes	No
Predicted	Yes	70	05
	No	10	15

- a) How many wrong predictions have been performed in the above scenario?
- b) Calculate Recall, Precision and F1 Score.

******END OF THE QUESTION PAPER******