

#### AI / ML Exam

- 1. What Does AI stand for?
- A) Advanced Intelligence
- B) Artificial Intelligence
- C) Automated Integration
- D)Applied Integration
- 2. Which python library is commonly used in machine learning tasks?
- A) Numpy
- B) Pandas
- C) Matplotlib
- D) TensorFlow
- 3. What is the purpose of neural network in machine learning?
- A) To simulate human neural connections
- B) To organize data into structured format
- C) To Create Data Visualization
- D) To automate repetitive tasks
- 4. What is the term used to describe the process of machine learning improvising its performance over time?
- A) Regression
- B) Clustering
- C) Reinforcement Learning
- D) Training
- 5. Which of the following is NOT a supervised learning algorithm?
- A) Decision Trees
- B) K-Means
- C) Linear Regression
- D) Support Vector Machine

- 6. In python which library is commonly used to implement linear regression?
- A) Pandas
- B) Sci-kit Learn
- C) TensorFLow
- D) Matplotlib
- 7. What is the main goal of unsupervised learning?
- A) To Predict an output based on input data
- B) To classify data into pre-defined categories
- C) To discover patterns or structures in Data
- D) To learn from feedback and improve performance
- 8. What is the purpose of the train-test split in machine learning?
- A) To divide data into input and output variables
- B) To determine the accuracy of a model
- C) To prevent overfitting by evaluating model performance on unseen data
- D) To visualize the relationship between variables
- 9. Which of the following is an example of supervised learning?
- A) Clustering
- B) Decision Trees
- C) Principal Component analysis (PCA)
- D) K-Means
- 10. What is the purpose of feature scaling in machine learning?
- A) To remove outliers from the data
- B) To standardize the range of features to a similar scale
- C) To increase the complexity of the model
- D) To decrease the training time of the model
- 11. What is the purpose of training a machine learning model?
- A) To make it smarter
- B) To improve its performance
- C) To confuse it
- D) To entertain it
- 12. What is the main Goal of AI?
- A) To mimic human behaviour
- B) To automate Repetitive tasks
- C) To make machines sentient
- D) To improve efficiency and decision making
- 13. What's "training" in machine learning?
- A) Teaching a model to improve
- B) Making a model confused
- C) Drawing pictures
- D) Entertaining a model

- 14. Which of the following is NOT a Python library used in machine learning?
- A) Numpy
- B) Scikit-learn
- C) TensorFlow
- D) Pygame
- 15. What does "classification" mean in machine learning?
- A) Grouping data into categories
- B) Finding trends in data
- C) Predicting continuous values
- D) Making graphs
- 16. What's the purpose of "regression" in machine learning?
- A) Finding patterns in data
- B) Making data pretty
- C) Predicting continuous values
- D) Grouping data
- 17. What's the difference between supervised and unsupervised learning?
- A) Supervised learning needs labeled data, unsupervised doesn't.
- B) Unsupervised learning needs labeled data, supervised doesn't.
- C) They're the same.
- D) Both need labeled data.
- 18. What's "overfitting" in machine learning?
- A) Model is too simple
- B) Model works well on unseen data
- C) Model works poorly on training data
- D) Model works poorly on unseen data
- 19. What's a "decision tree" used for?
- A) Predicting continuous values
- B) Making decisions
- C) Grouping data
- D) Finding trends in data
- 20. What's the purpose of "feature scaling" in machine learning?
- A) Making features similar in range
- B) Removing features
- C) Increasing model complexity
- D) Adding more features

1.	Write down y	our/	preferred	language	and doma	in you	want to	work till	4th	year	?

# 2. Which Role are applying for Tick that part:

Technical Area:

# **Software Development:**

Software Developer: This is a broad category encompassing various development roles. They write, test, and maintain software applications. Specialisations within software development include:

**Web Developer:** Focuses on building websites and web applications. **Mobile App Developer:** Creates applications for smartphones and tablets. **Full-Stack Developer:** Works on both the front-end (user interface) and back-end (server-side) of applications.

### **Data Science and Machine Learning:**

**Data Scientist:** Analyzes and interprets large datasets to extract valuable insights. **Machine Learning Engineer:** Builds and implements machine learning models for tasks like prediction, classification, and recommendation.

#### **Cloud Computing:**

**Cloud Engineer:** Designs, builds, and manages cloud-based infrastructure and applications.

## **Security:**

**Information Security Analyst:** Identifies, assesses, and mitigates security risks within computer systems and networks.

**Security Software Engineer:** Develops software to protect against cyberattacks. **DevOps Engineer:** Bridges the gap between development and operations teams, overseeing the entire software development lifecycle.

**Software Architect:** Designs and plans the overall architecture of software systems.

Next Step is the Interview Round. Only for shortlisted students.

Thank you so much for your time and effort

GDSC Echelon!

Best of luck to everyone!