

Artificial Intelligence	
SOURCE: 01	Artificial Intelligence (GATE EXAM)
01	Artificial Intelligence Syllabus and Analysis
02	What is Artificial Intelligence Lear AI with Real Life Examples
03	What is State Space Search Introduction to Problem Solving
04	Uninformed vs Informed Search with Example
05	Breadth First Search with Example Uninformed Search
06	Depth First Search (DFS) with Example Uninformed Search
07	Bidirectional Search Algorithm with Real Life Example
08	8-Puzzle Problem without Heuristic
09	What is Heuristic in AI Why we use Heuristic How to Calculate Heuristic
10	How to Solve 8-Puzzle Problem with Heuristic (Informed Search)
11	Generate and Test Search with Real Life Example
12	Best First Search Algorithm How It Works Pros and Cons
13	Beam Search Algorithm Heuristic Search Techniques
14	Hill Climbing Algorithm with Real Live Examples
15	A* Algorithm with Examples
16	How to Proof A* Admissible Underestimation and Overestimation of A*
17	AO* Algorithm with Example
18	Introduction to Game Playing Algorithm with Example
19	Minimax Algorithm in Game Playing
20	Alpha Beta Pruning with Example
21	Knowledge Representation and Reasoning Logic, Semantic Net, Frames Etc
22	Propositional Logic in Artificial Intelligence Knowledge Representation
23	Introduction to Intelligent Agents and Their Types with Examples
24	Simple Reflex Agent with Example
25	Model Based Reflex Agent with Real Live Example
26	Goal Based Agents with Real Life Example
27	Utility Based Agents with Real Live Examples
28	Fuzzy Logic with Examples
29	Various Operations in Fuzzy Logic with Examples
30	Introduction to Neural Networks with Examples
31	Natural Language Processing NLP with Demo and Example
32	Supervised, Unsupervised and Reinforcement Learning
33	Genetic Algorithm Simplest Explanation with Real Life Example
34	What is Constraint Satisfaction Constraint Satisfaction Problem (CSP) with Example
35	How Constraint Satisfaction Algorithm Works Explained with Interesting Example
36	Branch and Bound Algorithm with Examples Easiest Explanation of B&B with Examples
37	0/1 Knapsack Using Branch and Bound with Examples
38	Reasoning Under Uncertainty
39	When There is Uncertainty
40	Informed vs Uninformed vs Adversarial Search with Examples
41	Propositional Logic
42	Predicate Logic
43	How to Write First Order / Predicate Logic
44	Negation of Quantifiers Predicate Logic Logic with Certainty
45	Bayes Theorem and Total Probability with Examples
46	Bayesian Network with Examples Easiest Explanation
47	Likelihood Weight Sampling Inference Through Sampling Uncertainty
48	Rejection sampling Probabilistic Inference Sampling
49	Probabilistic Inference Sampling
50	Bayesian Network Numerical Example
51	Understand Artificial Neural Networks form Basics with Examples Components Work
52	Token & Parameters in Llama3 META Models 8B & 70B Parameters Model GPT Model

Machine Learning	
SOURCE: 01	Data Science and Machine Learning (GATE EXAM)
01	Introduction to Data Science & ML & Roadmap
02	Supervised Learning Algorithms
03	Introduction to Regression with Real Life Examples
04	Linear Regression with Real Life Examples and Calculations Easiest Explanation
05	Logistic Regression with Simplest and Easiest Example
06	Linear Regression vs Logistic Regression Supervised Learning
07	kNN Classification with Real Life Example Movie Imdb Example Supervised Learning
08	Naïve Bayes Classification Full Explanation with Examples
09	Introduction to Decision Tree with Real Life Examples
10	Decision Tree ID3 Algorithm with Examples and Calculations
11	Conditional Probability with Easiest Explanations and Example
12	Introduction to Ensemble Learning with Real Life Examples
13	K-Mean Clustering with Numerical Example Unsupervised Learning
14	Hierarchical Clustering Agglomerative vs Divisive with Examples
15	Single Linkage clustering Agglomerative Clustering Hierarchical Clustering
16	Complete Linkage Clustering with Example Clustering in Unsupervised Learning
17	K-medoids Clustering with Numerical Example
18	Random Forest in Machine Learning
19	kNN for Classified and Regression with Easiest Explanation
20	Mean, Median, Mode with Real Life Examples
21	Standard Deviation and Variance with Examples
22	Bagging / Bootstrap Aggregating with Examples
23	Supervised vs Unsupervised Learning with Real Life Examples
24	Python Code for Mean, Median, Mode, SD< Variance and Range
25	How Weights are Increased in Boosting Ensemble Learning
26	BAGGING vs BOOSTING vs STACKING in Ensemble Learning
27	Bayes Theorem and Total Probability with Examples
28	Cross Validation in Machine Learning with Examples
29	Pearson’s Correlation Coefficient Supervised Learning Data Science and ML
30	kNN (k Nearest Neighbor) Numerical Examples Supervised Learning
31	Decision Tree Example Calculate Entropy, Information Gain Supervised Learning
32	Single Linkage Clustering Example Unsupervised Learning
33	Token and Parameters in Llama3 META Models 8B and 70B Parameters Model GPT
34	What is Data Preprocessing and Data Clearing Various Techniques with Examples
35	How to Deal with Missing Values in Dataset Data Processing and Clearing, Imputation
36	kNN Imputation with Examples Data Preprocessing and Data Clearing
37	Fit() and Transfer() Method Data Preprocessing
38	Feature Extraction in Data Preprocessing