Fundamentals of AI

1. What does AI stand for?
   A. Advanced Integration
   B. Artificial Intelligence
   C. Automated Interface
   D. Applied Informatics
   Answer: B
2. The main goal of Artificial Intelligence is to:
   A. Store large amounts of data
   B. Improve internet speed
   C. Make machines perform intelligent tasks
   D. Design computer hardware
   Answer: C
3. Which of the following is a core component of AI?
   A. Cloud Storage
   B. Machine Learning
   C. Web Hosting
   D. Network Cabling
   Answer: B
4. Early developments in AI mainly focused on:
   A. Social media analytics
   B. E-commerce platforms
   C. Game playing and logical problem solving
   D. Mobile applications
   Answer: C
5. Narrow AI is also called:
   A. Artificial Superintelligence
   B. Strong AI
   C. General AI
   D. Weak AI
   Answer: D
6. General AI refers to:
   A. AI with human-like intelligence
   B. AI that performs only one task
   C. AI limited to gaming
   D. AI used only in robotics
   Answer: A
7. Artificial Superintelligence (ASI) means:
   A. AI equal to humans
   B. AI that surpasses human intelligence
   C. AI used in education
   D. AI for automation only
   Answer: B
8. Which of the following is an example of Narrow AI?
   A. Self-aware robot
   B. Artificial Superintelligence
   C. Voice assistant
   D. Human brain
   Answer: C

9. AI is applied in which sector?
   A. Healthcare
   B. Finance
   C. Transportation
   D. All of the above
   Answer: D
10. One major ethical concern in AI is:
   A. Data privacy
   B. Faster processing speed
   C. Increased storage
   D. Hardware cost
   Answer: A
11. A key limitation of AI is that it:
   A. Thinks like humans
   B. Has emotions
   C. Lacks human judgment and emotions
   D. Learns without data
   Answer: C
12. Statistics is mainly used to:
   A. Design networks
   B. Analyze and interpret data
   C. Build websites
   D. Replace algorithms
   Answer: B
13. In AI/ML, statistics helps to:
   A. Remove features
   B. Increase memory
   C. Provide mathematical foundation for analysis
   D. Build hardware
   Answer: C
14. Which of the following is a basic statistical measure?
   A. Router
   B. Median
   C. Compiler
   D. Server
   Answer: B
15. Regression analysis is used to:
   A. Predict continuous values
   B. Sort data
   C. Encode categories
   D. Delete records
   Answer: A
16. Simple regression uses:
   A. Multiple outputs
   B. Many dependent variables
   C. One independent variable
   D. No variables
   Answer: C

17. Multiple regression involves:
    A. One feature only
    B. More than one independent variable
    C. Only categorical variables
    D. No output variable
    Answer: B
18. Polynomial regression is suitable when the relationship is:
    A. Linear only
    B. Constant
    C. Random
    D. Non-linear
    Answer: D
19. The first stage in the statistical process is:
    A. Data cleaning
    B. Problem definition
    C. Model evaluation
    D. Deployment
    Answer: B
20. Data cleaning is important because it:
    A. Reduces model accuracy
    B. Increases noise
    C. Improves data quality
    D. Deletes all errors automatically
    Answer: C
21. Exploratory Data Analysis (EDA) helps to:
    A. Deploy models
    B. Understand data patterns
    C. Replace regression
    D. Encode categories
    Answer: B
22. Applying statistical models helps to:
    A. Remove datasets
    B. Store data
    C. Predict outcomes
    D. Delete features
    Answer: C
23. Model evaluation is used to:
    A. Train the dataset
    B. Increase bias
    C. Check model performance
    D. Collect new data
    Answer: C
24. Insights from statistical analysis help in:
    A. Random guessing
    B. Decision-making
    C. Hardware design
    D. Data duplication
    Answer: B

25. Deployment means:
    A. Cleaning raw data
    B. Testing the dataset
    C. Using the model in real-world applications
    D. Removing variables
    Answer: C