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| Name of educator | Ayushman Dubey |
| Title of Project | Bike Sharing Demand Prediction |

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|  | Question | Options-provide 4 options  **All of the above and**  **None of the above**  **Strictly not allowed** | Correct answer |
| Q1 | Which of the following is NOT a typical feature used in bike sharing demand prediction? | (a) Temperature (b) Humidity (c) User's Age (d) Holiday | **Answer:** (c) User's Age |
| Q2 | What type of machine learning problem is bike sharing demand prediction? | (a) Classification (b) Regression (c) Clustering (d) Dimensionality Reduction | **Answer:** (b) Regression |
| Q3 | Which Python library is commonly used for data manipulation and analysis in this project? | (a) NumPy (b) Pandas (c) Seaborn (d) Scikit-learn | **Answer:** (b) Pandas |
| Q4 | What is the purpose of feature engineering in this project? | (a) To collect raw data from different sources (b) To select the best machine learning model (c) To transform and create new features to improve model accuracy (d) To deploy the model in a real-world environment | **Answer:** (c) To transform and create new features to improve model accuracy |
| Q5 | Which metric is commonly used to evaluate the performance of a regression model? | (a) Accuracy (b) Precision (c) Recall (d) Root Mean Squared Error | **Answer:** (d) Root Mean Squared Error (RMSE) |
| Q6 | What is the main challenge addressed by this project? | (a) Predicting customer satisfaction with bike-sharing services (b) Optimizing bike maintenance schedules (c) Forecasting the demand for bike rentals to ensure stable supply (d) Reducing traffic congestion in urban areas | **Answer:** (c) Forecasting the demand for bike rentals to ensure stable supply |
| Q7 | Which of the following factors is LEAST likely to have a significant impact on bike rental demand? | (a) Weather conditions (b) Time of day (c) Day of the week (d) User's preferred bike color | **Answer:** (d) User's preferred bike color |
| Q8 | What is the role of historical bike usage data in this project? | (a) To identify potential customers (b) To understand patterns and trends in bike rental demand (c) To predict future weather conditions (d) To determine the optimal number of bikes to deploy | **Answer:** (b) To understand patterns and trends in bike rental demand |
| Q9 | What is the purpose of using a machine learning model in this project? | (a) To automate data collection (b) To visualize data using graphs and charts (c) To make predictions based on historical data and features (d) To perform statistical analysis on the data | **Answer:** (c) To make predictions based on historical data and features |
| Q10 | Which of the following is a potential benefit of accurate bike rental demand forecasting? | (a) Increased bike maintenance costs (b) Reduced resource wastage and improved allocation (c) Decreased customer satisfaction (d) Higher carbon emissions | **Answer:** (b) Reduced resource wastage and improved allocation |