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| **Sinhgad Technical Education Society’s**  **Sinhgad Academy of Engineering, KONDHWA (BK),PUNE**  **COMPUTER ENGINEERING DEPARTMENT**  **ASSIGNMENT NO-05**  3  **T.E (Computer) (Semester –VI) A.Y.2021-2022**  **Subject: Data Science And Big Data Analytics Division –ALL**   |  | | --- | |  | | | |
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| |  |  | | --- | --- | | Que. No | Questions | | Q1) | Explain 3 application of clustering | | Q2) | Explain the K-means algorithm | | Q3) | With an example, explain how cluster inertia is calculated. | | Q4) | Write a short note on elbow plot | | Q5) | You require some sort of human judgement to ensure that your clusters are optimum.which points do you consider? | | Q6) | Write a short note on K-Nearest Neighbours (KNN) classification algorithm. | | Q7) | Describe the goals and applications of time series analysis. | | Q8) | What are some of the major applications of social network analysis? | | Q9) | Explain holdout method of cross-validation | | Q10) | Write a short note on Random search hyperparameter tuning technique. | |