|  | **Perform the following tasks:** | **Marks** |
| --- | --- | --- |
| Q.1 | | Perform Feature Engineering  a) Perform basic exploration like checking for top 5 records, shape, statistical info, duplicates, Null values etc.  b) Extract Date, Month, Year from Date of Journey column | | --- | | **[10]** |
| Q.2 | | Perform Exploratory Data Analysis (EDA) tasks  a) Which airline is most preferred airline  c) Find the majority of the flights take off from which source  d) Find maximum flights land in which destination | | --- | | **[6]** |
| Q.5 | | Compare independent features with Target feature to check  the impact on price  a) Which airline has the highest price  b) Check if the business class flights are high price or low and find only those flights which price is higher than 50k | | --- | | **[4]** |
|  | | Perform encoding for the required features according to the data | | --- | | **[5]** |
| Q.6 | | Build multiple model by using different algorithm such as Linear Regression, Decision Tree, and Random Forest etc. and check the performance of your model. | | --- | | **[10]** |
|  | | Compare all of the models and justify your choice about the optimum model by using different evaluation technique and tune the models as per the requirement. | | --- | | **[8]** |
| Q.7 | | Write a conclusion from the business point of view. Finally perform the same preprocessing technique for test data best practice using pipeline. | | --- | | **[7]** |