Students Survey Analysis

Analyze student event feedback to uncover satisfaction trends and suggest improvements using survey data.

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1 1. STUDENT SATISFACTION ANALYSIS

```
Dataset loaded successfully with 'latin1' encoding!
Splitting 'Average/ Percentage' into 'Average_Score' and 'Percentage_Value'...
Original 'Average/ Percentage' column removed.
All plots will be saved to a PDF file
All plots will be saved to 'Student_Satisfaction_Analysis_Plots.pdf'
--- 2. Initial Inspection & Overview ---
2.1 Head of the DataFrame:
   SN  Total Feedback Given  Total Configured  \
0   1                     1                12
1   2                     1                12
2   3                     1                12
3   4                     1                12
4   5                     1                12


                                         Questions  Weightage 1  \
0  How much of the syllabus was covered in the cl...            0
1  How well did the teachers prepare for the clas...            0
2    How well were the teachers able to communicate?            0
3  The teacher s approach to teaching can best be...            0
4  Fairness of the internal evaluation process by...            0


   Weightage 2  Weightage 3  Weightage 4  Weightage 5  \
0            0            1            0            0
1            0            0            0            1
2            0            0            0            1
3            0            1            0            0
4            0            0            1            0


             Course Name             Basic Course  Average_Score  \
0  FY B.VOC FOOD TECHNOLOGY  B.VOC FOOD TECHNOLOGY            3.0
1  FY B.VOC FOOD TECHNOLOGY  B.VOC FOOD TECHNOLOGY            5.0
2  FY B.VOC FOOD TECHNOLOGY  B.VOC FOOD TECHNOLOGY            5.0
3  FY B.VOC FOOD TECHNOLOGY  B.VOC FOOD TECHNOLOGY            3.0
4  FY B.VOC FOOD TECHNOLOGY  B.VOC FOOD TECHNOLOGY            4.0
```

```
     Percentage_Value
0               60.0
1              100.0
2              100.0
3               60.0
4               80.0
```

2.2 Tail of the DataFrame:

```
      SN   Total Feedback Given   Total Configured  \
575   16                      9                170
576   17                      9                170
577   18                      9                170
578   19                      9                170
579   20                      9                170


                                            Questions   Weightage 1  \
575   The institute/ teachers use student-centric me...            1
576   Teachers encourage you to participate in extra...            0
577   Efforts are made by the institute/ teachers to...            0
578   What percentage of teachers use ICT tools such...            0
579   The overall quality of the teaching-learning p...            0


      Weightage 2   Weightage 3   Weightage 4   Weightage 5  Course Name   \
575             0             0             2             6         TYBSC
576             0             0             3             6         TYBSC
577             0             1             2             6         TYBSC
578             0             1             3             5         TYBSC
579             0             1             2             6         TYBSC


             Basic Course   Average_Score   Percentage_Value
575   BACHELOR OF SCIENCE            4.33              86.67
576   BACHELOR OF SCIENCE            4.67              93.33
577   BACHELOR OF SCIENCE            4.56              91.11
578   BACHELOR OF SCIENCE            4.44              88.89
579   BACHELOR OF SCIENCE            4.56              91.11
```

2.3 DataFrame Info (Data Types & Non-Null Counts):

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 580 entries, 0 to 579
Data columns (total 13 columns):
 #   Column                 Non-Null Count   Dtype
---  ------                 --------------   -----
 0   SN                     580 non-null     int64
 1   Total Feedback Given   580 non-null     int64
 2   Total Configured       580 non-null     int64
```

```
3    Questions            580 non-null    object
4    Weightage 1          580 non-null    int64
5    Weightage 2          580 non-null    int64
6    Weightage 3          580 non-null    int64
7    Weightage 4          580 non-null    int64
8    Weightage 5          580 non-null    int64
9    Course Name          580 non-null    object
10   Basic Course         580 non-null    object
11   Average_Score        580 non-null    float64
12   Percentage_Value     580 non-null    float64
dtypes: float64(2), int64(8), object(3)
memory usage: 59.0+ KB
```

2.4 Descriptive Statistics for Numerical Columns:

	SN	Total Feedback Given	Total Configured	Weightage 1 \
count	580.000000	580.000000	580.000000	580.000000
mean	10.500000	14.310345	92.517241	0.527586
std	5.771259	16.488031	114.491780	1.305336
min	1.000000	1.000000	12.000000	0.000000
25%	5.750000	3.000000	20.000000	0.000000
50%	10.500000	7.000000	42.000000	0.000000
75%	15.250000	17.000000	123.000000	1.000000
max	20.000000	74.000000	559.000000	19.000000

	Weightage 2	Weightage 3	Weightage 4	Weightage 5	Average_Score \
count	580.000000	580.000000	580.000000	580.000000	580.000000
mean	1.187931	2.537931	5.082759	4.974138	3.842793
std	1.686334	3.193302	7.288293	6.494931	0.629038
min	0.000000	0.000000	0.000000	0.000000	1.330000
25%	0.000000	0.000000	1.000000	1.000000	3.500000
50%	0.000000	1.000000	3.000000	3.000000	3.920000
75%	2.000000	3.250000	6.000000	6.000000	4.250000
max	8.000000	26.000000	52.000000	38.000000	5.000000

	Percentage_Value
count	580.000000
mean	76.855690
std	12.578606
min	26.670000
25%	70.000000
50%	78.330000
75%	85.000000
max	100.000000

2.5 Descriptive Statistics for All Columns (including categorical):

```
            SN  Total Feedback Given  Total Configured  \
count  580.000000            580.000000        580.000000
unique        NaN                   NaN               NaN
top           NaN                   NaN               NaN
freq          NaN                   NaN               NaN
mean    10.500000             14.310345         92.517241
std      5.771259             16.488031        114.491780
min      1.000000              1.000000         12.000000
25%      5.750000              3.000000         20.000000
50%     10.500000              7.000000         42.000000
75%     15.250000             17.000000        123.000000
max     20.000000             74.000000        559.000000
```

```
                                                  Questions  Weightage 1  \
count                                                   580   580.000000
unique                                                   20          NaN
top     How much of the syllabus was covered in the cl...          NaN
freq                                                     29          NaN
mean                                                    NaN     0.527586
std                                                     NaN     1.305336
min                                                     NaN     0.000000
25%                                                     NaN     0.000000
50%                                                     NaN     0.000000
75%                                                     NaN     1.000000
max                                                     NaN    19.000000
```

```
        Weightage 2  Weightage 3  Weightage 4  Weightage 5  \
count    580.000000   580.000000   580.000000   580.000000
unique          NaN          NaN          NaN          NaN
top             NaN          NaN          NaN          NaN
freq            NaN          NaN          NaN          NaN
mean       1.187931     2.537931     5.082759     4.974138
std        1.686334     3.193302     7.288293     6.494931
min        0.000000     0.000000     0.000000     0.000000
25%        0.000000     0.000000     1.000000     1.000000
50%        0.000000     1.000000     3.000000     3.000000
75%        2.000000     3.250000     6.000000     6.000000
max        8.000000    26.000000    52.000000    38.000000
```

```
                    Course Name         Basic Course  Average_Score  \
count                       580                  580     580.000000
unique                       29                   16            NaN
top     FY B.VOC FOOD TECHNOLOGY  BACHELOR OF SCIENCE            NaN
```

```
freq                             20                 60              NaN
mean                            NaN                NaN         3.842793
std                             NaN                NaN         0.629038
min                             NaN                NaN         1.330000
25%                             NaN                NaN         3.500000
50%                             NaN                NaN         3.920000
75%                             NaN                NaN         4.250000
max                             NaN                NaN         5.000000

        Percentage_Value
count         580.000000
unique               NaN
top                  NaN
freq                 NaN
mean           76.855690
std            12.578606
min            26.670000
25%            70.000000
50%            78.330000
75%            85.000000
max           100.000000
```
2.6 Shape of the DataFrame (Rows, Columns):
(580, 13)
2.7 Column Names:
['SN', 'Total Feedback Given', 'Total Configured', 'Questions', 'Weightage 1', 'Weightage 2'
--- 3. Missing Values Inspection ---
3.1 Number of Missing Values per Column:
```
SN                      0
Total Feedback Given    0
Total Configured        0
Questions               0
Weightage 1             0
Weightage 2             0
Weightage 3             0
Weightage 4             0
Weightage 5             0
Course Name             0
Basic Course            0
Average_Score           0
Percentage_Value        0
dtype: int64
```
3.2 Percentage of Missing Values per Column:
```
SN                      0.0
```

```
Total Feedback Given      0.0
Total Configured          0.0
Questions                 0.0
Weightage 1               0.0
Weightage 2               0.0
Weightage 3               0.0
Weightage 4               0.0
Weightage 5               0.0
Course Name               0.0
Basic Course              0.0
Average_Score             0.0
Percentage_Value          0.0
dtype: float64
No missing values found in the dataset. Heatmap not generated.
--- 4. Duplicate Values Inspection ---
4.1 Number of Duplicate Rows:
0
No duplicate rows found.
--- 5. Outlier Inspection (for Numerical Columns) ---
5.1 Interquartile Range (IQR) and Potential Outliers (for numerical columns):
- Column 'SN': Skipping outlier detection as it's a serial number.
- Column 'Total Feedback Given': 60 potential outliers (outside [-18.00, 38.00])
40     74
41     74
42     74
43     74
44     74
Name: Total Feedback Given, dtype: int64
- Column 'Total Configured': 40 potential outliers (outside [-134.50, 277.50])
420     559
421     559
422     559
423     559
424     559
Name: Total Configured, dtype: int64
- Column 'Weightage 1': 25 potential outliers (outside [-1.50, 2.50])
44      3
58     19
86      3
97      3
98      3
Name: Weightage 1, dtype: int64
- Column 'Weightage 2': 21 potential outliers (outside [-3.00, 5.00])
```

```
46      6
413     7
425     6
431     7
433     6
Name: Weightage 2, dtype: int64
- Column 'Weightage 3': 34 potential outliers (outside [-4.88, 8.12])
40     13
41     14
43     17
44      9
46     22
Name: Weightage 3, dtype: int64
- Column 'Weightage 4': 52 potential outliers (outside [-6.50, 13.50])
40     27
41     52
42     28
43     35
44     21
Name: Weightage 4, dtype: int64
- Column 'Weightage 5': 59 potential outliers (outside [-6.50, 13.50])
40     31
42     36
43     17
44     38
45     35
Name: Weightage 5, dtype: int64
- Column 'Average_Score': 12 potential outliers (outside [2.38, 5.38])
7       2.00
12      2.00
17      2.00
118     2.33
207     1.33
Name: Average_Score, dtype: float64
- Column 'Percentage_Value': 12 potential outliers (outside [47.50, 107.50])
7      40.00
12     40.00
17     40.00
118    46.67
207    26.67
Name: Percentage_Value, dtype: float64
--- 6. Outlier Handling (Capping with Percentiles) ---
Replacing outliers with 5th and 95th percentiles for identified numerical columns.
```

- Column 'Total Feedback Given': Outliers capped between 1.00 and 46.00
- Column 'Total Configured': Outliers capped between 14.00 and 331.00
- Column 'Weightage 1': Outliers capped between 0.00 and 2.00
- Column 'Weightage 2': Outliers capped between 0.00 and 5.00
- Column 'Weightage 3': Outliers capped between 0.00 and 9.00
- Column 'Weightage 4': Outliers capped between 0.00 and 19.00
- Column 'Weightage 5': Outliers capped between 0.00 and 17.00
- Column 'Average_Score': Outliers capped between 2.75 and 5.00
- Column 'Percentage_Value': Outliers capped between 55.00 and 100.00
6.2 Generating Consolidated Box Plots for Numerical Columns (visual outlier detection, after
--- 7.1. Plotting Density Distributions ---
--- 8. Summary and Descriptive Statistics (Post-Cleaning) ---
Descriptive statistics for numerical columns after outlier capping:

	SN	Total Feedback Given	Total Configured	Weightage 1 \
count	580.000000	580.000000	580.000000	580.000000
mean	10.500000	13.344828	84.724138	0.403448
std	5.771259	13.510760	86.512909	0.672162
min	1.000000	1.000000	14.000000	0.000000
25%	5.750000	3.000000	20.000000	0.000000
50%	10.500000	7.000000	42.000000	0.000000
75%	15.250000	17.000000	123.000000	1.000000
max	20.000000	46.000000	331.000000	2.000000

	Weightage 2	Weightage 3	Weightage 4	Weightage 5	Average_Score \
count	580.000000	580.000000	580.000000	580.000000	580.000000
mean	1.127586	2.372414	4.506897	4.555172	3.863621
std	1.504489	2.602496	5.165812	5.119510	0.577126
min	0.000000	0.000000	0.000000	0.000000	2.750000
25%	0.000000	0.000000	1.000000	1.000000	3.500000
50%	0.000000	1.000000	3.000000	3.000000	3.920000
75%	2.000000	3.250000	6.000000	6.000000	4.250000
max	5.000000	9.000000	19.000000	17.000000	5.000000

	Percentage_Value
count	580.000000
mean	77.272362
std	11.540479
min	55.000000
25%	70.000000
50%	78.330000
75%	85.000000
max	100.000000

--- 8.1. Plotting Descriptive Statistics ---

--- 9. Grouped Analysis by Basic Course (Overall Average Weightage) ---
Grouping data by 'Basic Course'.
Average Scores by Basic Course:

	Weightage 1	Weightage 2 \
Basic Course		
B.SC. COMPUTER SCIENCE	1.550000	4.250000
B.VOC FOOD TECHNOLOGY	0.000000	0.150000
BACHELOR OF ARTS	0.050000	0.500000
BACHELOR OF COMMERCE	1.350000	4.000000
BACHELOR OF COMMERCE (ACCOUNTING AND FINANCE)	0.875000	2.675000
BACHELOR OF COMMERCE (BANKING AND INSURANCE)	0.600000	0.750000
BACHELOR OF MANAGEMENT STUDIES	0.366667	0.583333
BACHELOR OF SCIENCE	0.216667	1.033333
MA PSYCHOLOGY	0.200000	0.525000
MSC ANALYTICAL CHEMISTRY	0.325000	1.125000
MSC COMPUTER SCIENCE	0.125000	0.350000
MSC DATA SCIENCE	0.200000	0.600000
MSC INFORMATION TECHNOLOGY	0.100000	0.075000
MSC MICROBIOLOGY	0.325000	0.800000
MSC ORGANIC CHEMISTRY	0.700000	0.850000
MSC PHYSICS	0.000000	0.550000

	Weightage 3	Weightage 4 \
Basic Course		
B.SC. COMPUTER SCIENCE	6.200000	7.750000
B.VOC FOOD TECHNOLOGY	0.450000	0.250000
BACHELOR OF ARTS	1.650000	2.700000
BACHELOR OF COMMERCE	6.950000	11.950000
BACHELOR OF COMMERCE (ACCOUNTING AND FINANCE)	6.400000	17.900000
BACHELOR OF COMMERCE (BANKING AND INSURANCE)	1.150000	6.050000
BACHELOR OF MANAGEMENT STUDIES	1.766667	4.083333
BACHELOR OF SCIENCE	1.716667	2.666667
MA PSYCHOLOGY	2.000000	2.050000
MSC ANALYTICAL CHEMISTRY	1.750000	2.500000
MSC COMPUTER SCIENCE	0.975000	2.275000
MSC DATA SCIENCE	1.075000	1.100000
MSC INFORMATION TECHNOLOGY	0.350000	1.300000
MSC MICROBIOLOGY	2.700000	2.475000
MSC ORGANIC CHEMISTRY	2.400000	7.300000
MSC PHYSICS	0.450000	0.600000

	Weightage 5	Average_Score \
Basic Course		

Basic Course		
B.SC. COMPUTER SCIENCE	5.600000	3.354500
B.VOC FOOD TECHNOLOGY	0.150000	3.512500
BACHELOR OF ARTS	4.100000	4.335000
BACHELOR OF COMMERCE	11.700000	3.720250
BACHELOR OF COMMERCE (ACCOUNTING AND FINANCE)	15.750000	4.075500
BACHELOR OF COMMERCE (BANKING AND INSURANCE)	11.450000	4.350000
BACHELOR OF MANAGEMENT STUDIES	5.466667	4.104667
BACHELOR OF SCIENCE	3.633333	3.860333
MA PSYCHOLOGY	1.200000	3.613000
MSC ANALYTICAL CHEMISTRY	2.300000	4.033750
MSC COMPUTER SCIENCE	1.775000	3.858000
MSC DATA SCIENCE	0.025000	3.221000
MSC INFORMATION TECHNOLOGY	1.675000	4.354500
MSC MICROBIOLOGY	2.200000	3.538000
MSC ORGANIC CHEMISTRY	5.750000	3.972500
MSC PHYSICS	0.400000	3.462500

Basic Course	Percentage_Value
B.SC. COMPUTER SCIENCE	67.07350
B.VOC FOOD TECHNOLOGY	70.25000
BACHELOR OF ARTS	86.70575
BACHELOR OF COMMERCE	74.40850
BACHELOR OF COMMERCE (ACCOUNTING AND FINANCE)	81.52150
BACHELOR OF COMMERCE (BANKING AND INSURANCE)	87.00000
BACHELOR OF MANAGEMENT STUDIES	82.09250
BACHELOR OF SCIENCE	77.19150
MA PSYCHOLOGY	72.26450
MSC ANALYTICAL CHEMISTRY	80.67875
MSC COMPUTER SCIENCE	77.16075
MSC DATA SCIENCE	64.41650
MSC INFORMATION TECHNOLOGY	87.08300
MSC MICROBIOLOGY	70.76200
MSC ORGANIC CHEMISTRY	79.47050
MSC PHYSICS	69.25000

Basic Courses by Average Score (Sorted):

Basic Course	Weightage 1	Weightage 2 \
MSC INFORMATION TECHNOLOGY	0.100000	0.075000
BACHELOR OF COMMERCE (BANKING AND INSURANCE)	0.600000	0.750000
BACHELOR OF ARTS	0.050000	0.500000
BACHELOR OF MANAGEMENT STUDIES	0.366667	0.583333
BACHELOR OF COMMERCE (ACCOUNTING AND FINANCE)	0.875000	2.675000

Basic Course		
MSC ANALYTICAL CHEMISTRY	0.325000	1.125000
MSC ORGANIC CHEMISTRY	0.700000	0.850000
BACHELOR OF SCIENCE	0.216667	1.033333
MSC COMPUTER SCIENCE	0.125000	0.350000
BACHELOR OF COMMERCE	1.350000	4.000000
MA PSYCHOLOGY	0.200000	0.525000
MSC MICROBIOLOGY	0.325000	0.800000
B.VOC FOOD TECHNOLOGY	0.000000	0.150000
MSC PHYSICS	0.000000	0.550000
B.SC. COMPUTER SCIENCE	1.550000	4.250000
MSC DATA SCIENCE	0.200000	0.600000

	Weightage 3	Weightage 4 \
Basic Course		
MSC INFORMATION TECHNOLOGY	0.350000	1.300000
BACHELOR OF COMMERCE (BANKING AND INSURANCE)	1.150000	6.050000
BACHELOR OF ARTS	1.650000	2.700000
BACHELOR OF MANAGEMENT STUDIES	1.766667	4.083333
BACHELOR OF COMMERCE (ACCOUNTING AND FINANCE)	6.400000	17.900000
MSC ANALYTICAL CHEMISTRY	1.750000	2.500000
MSC ORGANIC CHEMISTRY	2.400000	7.300000
BACHELOR OF SCIENCE	1.716667	2.666667
MSC COMPUTER SCIENCE	0.975000	2.275000
BACHELOR OF COMMERCE	6.950000	11.950000
MA PSYCHOLOGY	2.000000	2.050000
MSC MICROBIOLOGY	2.700000	2.475000
B.VOC FOOD TECHNOLOGY	0.450000	0.250000
MSC PHYSICS	0.450000	0.600000
B.SC. COMPUTER SCIENCE	6.200000	7.750000
MSC DATA SCIENCE	1.075000	1.100000

	Weightage 5	Average_Score \
Basic Course		
MSC INFORMATION TECHNOLOGY	1.675000	4.354500
BACHELOR OF COMMERCE (BANKING AND INSURANCE)	11.450000	4.350000
BACHELOR OF ARTS	4.100000	4.335000
BACHELOR OF MANAGEMENT STUDIES	5.466667	4.104667
BACHELOR OF COMMERCE (ACCOUNTING AND FINANCE)	15.750000	4.075500
MSC ANALYTICAL CHEMISTRY	2.300000	4.033750
MSC ORGANIC CHEMISTRY	5.750000	3.972500
BACHELOR OF SCIENCE	3.633333	3.860333
MSC COMPUTER SCIENCE	1.775000	3.858000
BACHELOR OF COMMERCE	11.700000	3.720250

MA PSYCHOLOGY	1.200000	3.613000
MSC MICROBIOLOGY	2.200000	3.538000
B.VOC FOOD TECHNOLOGY	0.150000	3.512500
MSC PHYSICS	0.400000	3.462500
B.SC. COMPUTER SCIENCE	5.600000	3.354500
MSC DATA SCIENCE	0.025000	3.221000

	Percentage_Value \
Basic Course	
MSC INFORMATION TECHNOLOGY	87.08300
BACHELOR OF COMMERCE (BANKING AND INSURANCE)	87.00000
BACHELOR OF ARTS	86.70575
BACHELOR OF MANAGEMENT STUDIES	82.09250
BACHELOR OF COMMERCE (ACCOUNTING AND FINANCE)	81.52150
MSC ANALYTICAL CHEMISTRY	80.67875
MSC ORGANIC CHEMISTRY	79.47050
BACHELOR OF SCIENCE	77.19150
MSC COMPUTER SCIENCE	77.16075
BACHELOR OF COMMERCE	74.40850
MA PSYCHOLOGY	72.26450
MSC MICROBIOLOGY	70.76200
B.VOC FOOD TECHNOLOGY	70.25000
MSC PHYSICS	69.25000
B.SC. COMPUTER SCIENCE	67.07350
MSC DATA SCIENCE	64.41650

	Overall_Metric_for_Plot
Basic Course	
MSC INFORMATION TECHNOLOGY	4.354500
BACHELOR OF COMMERCE (BANKING AND INSURANCE)	4.350000
BACHELOR OF ARTS	4.335000
BACHELOR OF MANAGEMENT STUDIES	4.104667
BACHELOR OF COMMERCE (ACCOUNTING AND FINANCE)	4.075500
MSC ANALYTICAL CHEMISTRY	4.033750
MSC ORGANIC CHEMISTRY	3.972500
BACHELOR OF SCIENCE	3.860333
MSC COMPUTER SCIENCE	3.858000
BACHELOR OF COMMERCE	3.720250
MA PSYCHOLOGY	3.613000
MSC MICROBIOLOGY	3.538000
B.VOC FOOD TECHNOLOGY	3.512500
MSC PHYSICS	3.462500
B.SC. COMPUTER SCIENCE	3.354500

```
MSC DATA SCIENCE                                    3.221000
--- 10. Performance Analysis by Basic Course (All Metrics - Detailed) ---
Detailed Average Metric Performance by Basic Course:
                                          Total Feedback Given  \
Basic Course
B.SC. COMPUTER SCIENCE                            27.000000
B.VOC FOOD TECHNOLOGY                              1.000000
BACHELOR OF ARTS                                  9.000000
BACHELOR OF COMMERCE                              38.000000
BACHELOR OF COMMERCE (ACCOUNTING AND FINANCE)     46.000000
BACHELOR OF COMMERCE (BANKING AND INSURANCE)      20.000000
BACHELOR OF MANAGEMENT STUDIES                    12.333333
BACHELOR OF SCIENCE                                9.333333
MA PSYCHOLOGY                                      6.000000
MSC ANALYTICAL CHEMISTRY                           8.000000
MSC COMPUTER SCIENCE                               5.500000
MSC DATA SCIENCE                                   3.000000
MSC INFORMATION TECHNOLOGY                         3.500000
MSC MICROBIOLOGY                                   8.500000
MSC ORGANIC CHEMISTRY                             17.000000
MSC PHYSICS                                        2.000000


                                          Total Configured  Weightage 1  \
Basic Course
B.SC. COMPUTER SCIENCE                            48.000000     1.550000
B.VOC FOOD TECHNOLOGY                             14.000000     0.000000
BACHELOR OF ARTS                                 131.000000     0.050000
BACHELOR OF COMMERCE                             331.000000     1.350000
BACHELOR OF COMMERCE (ACCOUNTING AND FINANCE)    128.000000     0.875000
BACHELOR OF COMMERCE (BANKING AND INSURANCE)      33.000000     0.600000
BACHELOR OF MANAGEMENT STUDIES                   116.666667     0.366667
BACHELOR OF SCIENCE                              168.000000     0.216667
MA PSYCHOLOGY                                     17.500000     0.200000
MSC ANALYTICAL CHEMISTRY                          43.000000     0.325000
MSC COMPUTER SCIENCE                              22.000000     0.125000
MSC DATA SCIENCE                                  17.000000     0.200000
MSC INFORMATION TECHNOLOGY                        20.500000     0.100000
MSC MICROBIOLOGY                                  24.000000     0.325000
MSC ORGANIC CHEMISTRY                             22.000000     0.700000
MSC PHYSICS                                       18.000000     0.000000


                                          Weightage 2  Weightage 3  \
Basic Course
```

Basic Course		
B.SC. COMPUTER SCIENCE	4.250000	6.200000
B.VOC FOOD TECHNOLOGY	0.150000	0.450000
BACHELOR OF ARTS	0.500000	1.650000
BACHELOR OF COMMERCE	4.000000	6.950000
BACHELOR OF COMMERCE (ACCOUNTING AND FINANCE)	2.675000	6.400000
BACHELOR OF COMMERCE (BANKING AND INSURANCE)	0.750000	1.150000
BACHELOR OF MANAGEMENT STUDIES	0.583333	1.766667
BACHELOR OF SCIENCE	1.033333	1.716667
MA PSYCHOLOGY	0.525000	2.000000
MSC ANALYTICAL CHEMISTRY	1.125000	1.750000
MSC COMPUTER SCIENCE	0.350000	0.975000
MSC DATA SCIENCE	0.600000	1.075000
MSC INFORMATION TECHNOLOGY	0.075000	0.350000
MSC MICROBIOLOGY	0.800000	2.700000
MSC ORGANIC CHEMISTRY	0.850000	2.400000
MSC PHYSICS	0.550000	0.450000

	Weightage 4	Weightage 5 \
Basic Course		
B.SC. COMPUTER SCIENCE	7.750000	5.600000
B.VOC FOOD TECHNOLOGY	0.250000	0.150000
BACHELOR OF ARTS	2.700000	4.100000
BACHELOR OF COMMERCE	11.950000	11.700000
BACHELOR OF COMMERCE (ACCOUNTING AND FINANCE)	17.900000	15.750000
BACHELOR OF COMMERCE (BANKING AND INSURANCE)	6.050000	11.450000
BACHELOR OF MANAGEMENT STUDIES	4.083333	5.466667
BACHELOR OF SCIENCE	2.666667	3.633333
MA PSYCHOLOGY	2.050000	1.200000
MSC ANALYTICAL CHEMISTRY	2.500000	2.300000
MSC COMPUTER SCIENCE	2.275000	1.775000
MSC DATA SCIENCE	1.100000	0.025000
MSC INFORMATION TECHNOLOGY	1.300000	1.675000
MSC MICROBIOLOGY	2.475000	2.200000
MSC ORGANIC CHEMISTRY	7.300000	5.750000
MSC PHYSICS	0.600000	0.400000

	Average_Score	Percentage_Value
Basic Course		
B.SC. COMPUTER SCIENCE	3.354500	67.07350
B.VOC FOOD TECHNOLOGY	3.512500	70.25000
BACHELOR OF ARTS	4.335000	86.70575
BACHELOR OF COMMERCE	3.720250	74.40850
BACHELOR OF COMMERCE (ACCOUNTING AND FINANCE)	4.075500	81.52150

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BACHELOR OF COMMERCE (BANKING AND INSURANCE)        4.350000           87.00000
BACHELOR OF MANAGEMENT STUDIES                      4.104667           82.09250
BACHELOR OF SCIENCE                                 3.860333           77.19150
MA PSYCHOLOGY                                       3.613000           72.26450
MSC ANALYTICAL CHEMISTRY                            4.033750           80.67875
MSC COMPUTER SCIENCE                                3.858000           77.16075
MSC DATA SCIENCE                                    3.221000           64.41650
MSC INFORMATION TECHNOLOGY                          4.354500           87.08300
MSC MICROBIOLOGY                                    3.538000           70.76200
MSC ORGANIC CHEMISTRY                               3.972500           79.47050
MSC PHYSICS                                         3.462500           69.25000
```

--- 11. Performance Analysis by Course Name (All Metrics) ---
Average Metric Performance by Course Name:

Course Name	Total Feedback Given	Total Configured \
FY B.VOC FOOD TECHNOLOGY	1.0	14.0
FY BCOM (ACCOUNTING & FINANCE)	46.0	119.0
FY BCOM (BANKING & INSURANCE)	20.0	33.0
FYBA	1.0	144.0
FYBMS	26.0	122.0
FYBSC	12.0	175.0
M.SC PART - 1 COMPUTER SCIENCE	4.0	24.0
M.SC PART - 2 COMPUTER SCIENCE	7.0	20.0
MA PSYCHOLOGY - 1	5.0	15.0
MA PSYCHOLOGY - 3	7.0	20.0
MSC ANALYTICAL CHEMISTRY SEM I	2.0	42.0
MSC ANALYTICAL CHEMISTRY SEM III	14.0	44.0
MSC DATA SCIENCE - 1	3.0	20.0
MSC DATA SCIENCE - 3	3.0	14.0
MSC INFORMATION TECHNOLOGY - 1	1.0	21.0
MSC INFORMATION TECHNOLOGY - 3	6.0	20.0
MSC MICROBIOLOGY - 1	3.0	24.0
MSC MICROBIOLOGY - 3	14.0	24.0
MSC ORGANIC CHEMISTRY - 3	17.0	22.0
MSC PHYSICS - 3	2.0	18.0
S.Y.B.A.F	46.0	137.0
SY COMPUTER SCIENCE	27.0	48.0
SYBCOM	37.0	331.0
SYBMS	7.0	123.0
SYBSC	7.0	159.0
TYBA	17.0	118.0
TYBCOM	39.0	331.0
TYBMS	4.0	105.0

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TYBSC                                         9.0            170.0

                                     Weightage 1  Weightage 2  Weightage 3  \
Course Name
FY B.VOC FOOD TECHNOLOGY                  0.00         0.15         0.45
FY BCOM (ACCOUNTING & FINANCE)            1.05         3.35         8.15
FY BCOM (BANKING & INSURANCE)             0.60         0.75         1.15
FYBA                                      0.00         0.00         0.05
FYBMS                                     0.90         1.55         3.75
FYBSC                                     0.25         1.30         2.00
M.SC PART - 1 COMPUTER SCIENCE            0.20         0.55         1.15
M.SC PART - 2 COMPUTER SCIENCE            0.05         0.15         0.80
MA PSYCHOLOGY - 1                         0.00         0.15         1.70
MA PSYCHOLOGY - 3                         0.40         0.90         2.30
MSC ANALYTICAL CHEMISTRY SEM I            0.00         0.00         0.25
MSC ANALYTICAL CHEMISTRY SEM III          0.65         2.25         3.25
MSC DATA SCIENCE - 1                      0.35         0.85         1.05
MSC DATA SCIENCE - 3                      0.05         0.35         1.10
MSC INFORMATION TECHNOLOGY - 1            0.00         0.00         0.00
MSC INFORMATION TECHNOLOGY - 3            0.20         0.15         0.70
MSC MICROBIOLOGY - 1                      0.45         0.35         0.65
MSC MICROBIOLOGY - 3                      0.20         1.25         4.75
MSC ORGANIC CHEMISTRY - 3                 0.70         0.85         2.40
MSC PHYSICS - 3                           0.00         0.55         0.45
S.Y.B.A.F                                 0.70         2.00         4.65
SY COMPUTER SCIENCE                       1.55         4.25         6.20
SYBCOM                                    1.35         3.80         6.45
SYBMS                                     0.05         0.05         0.60
SYBSC                                     0.25         1.60         2.50
TYBA                                      0.10         1.00         3.25
TYBCOM                                    1.35         4.20         7.45
TYBMS                                     0.15         0.15         0.95
TYBSC                                     0.15         0.20         0.65

                                     Weightage 4  Weightage 5  Average_Score  \
Course Name
FY B.VOC FOOD TECHNOLOGY                  0.25         0.15         3.5125
FY BCOM (ACCOUNTING & FINANCE)           18.50        15.80         4.0185
FY BCOM (BANKING & INSURANCE)             6.05        11.45         4.3500
FYBA                                      0.35         0.60         4.5500
FYBMS                                     7.85        11.80         4.0695
FYBSC                                     4.55         3.70         3.8335
M.SC PART - 1 COMPUTER SCIENCE            1.40         0.70         3.4875
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M.SC PART - 2 COMPUTER SCIENCE	3.15	2.85	4.2285
MA PSYCHOLOGY - 1	2.50	0.65	3.7300
MA PSYCHOLOGY - 3	1.60	1.75	3.4960
MSC ANALYTICAL CHEMISTRY SEM I	0.45	1.30	4.5250
MSC ANALYTICAL CHEMISTRY SEM III	4.55	3.30	3.5425
MSC DATA SCIENCE - 1	0.75	0.00	2.9960
MSC DATA SCIENCE - 3	1.45	0.05	3.4460
MSC INFORMATION TECHNOLOGY - 1	0.50	0.50	4.5000
MSC INFORMATION TECHNOLOGY - 3	2.10	2.85	4.2090
MSC MICROBIOLOGY - 1	0.70	0.85	3.3835
MSC MICROBIOLOGY - 3	4.25	3.55	3.6925
MSC ORGANIC CHEMISTRY - 3	7.30	5.75	3.9725
MSC PHYSICS - 3	0.60	0.40	3.4625
S.Y.B.A.F	17.30	15.70	4.1325
SY COMPUTER SCIENCE	7.75	5.60	3.3545
SYBCOM	12.90	10.55	3.7025
SYBMS	2.95	3.35	4.3570
SYBSC	1.65	1.00	3.2235
TYBA	5.05	7.60	4.1200
TYBCOM	11.00	12.85	3.7380
TYBMS	1.45	1.25	3.8875
TYBSC	1.80	6.20	4.5240

Course Name	Percentage_Value
FY B.VOC FOOD TECHNOLOGY	70.2500
FY BCOM (ACCOUNTING & FINANCE)	80.3920
FY BCOM (BANKING & INSURANCE)	87.0000
FYBA	91.0000
FYBMS	81.3845
FYBSC	76.6665
M.SC PART - 1 COMPUTER SCIENCE	69.7500
M.SC PART - 2 COMPUTER SCIENCE	84.5715
MA PSYCHOLOGY - 1	74.6000
MA PSYCHOLOGY - 3	69.9290
MSC ANALYTICAL CHEMISTRY SEM I	90.5000
MSC ANALYTICAL CHEMISTRY SEM III	70.8575
MSC DATA SCIENCE - 1	59.9165
MSC DATA SCIENCE - 3	68.9165
MSC INFORMATION TECHNOLOGY - 1	90.0000
MSC INFORMATION TECHNOLOGY - 3	84.1660
MSC MICROBIOLOGY - 1	67.6665
MSC MICROBIOLOGY - 3	73.8575

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MSC ORGANIC CHEMISTRY - 3                      79.4705
MSC PHYSICS - 3                                69.2500
S.Y.B.A.F                                      82.6510
SY COMPUTER SCIENCE                            67.0735
SYBCOM                                         74.0735
SYBMS                                          87.1430
SYBSC                                          64.4640
TYBA                                           82.4115
TYBCOM                                         74.7435
TYBMS                                          77.7500
TYBSC                                          90.4440
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--- 12. Question-level Analysis and Classification ---
Classification of Questions by Average Score:

	Average Score
Questions	
Fairness of the internal evaluation process by ...	4.215517
How well were the teachers able to communicate?	4.197241
The teachers illustrate the concepts through ex...	4.104483
How well did the teachers prepare for the classes?	4.090000
Teachers inform you about your expected compete...	3.979655
How much of the syllabus was covered in the class?	3.953103
Was your performance in assignments discussed w...	3.914483
Teachers encourage you to participate in extrac...	3.900690
Efforts are made by the institute/ teachers to ...	3.878966
The overall quality of the teaching-learning pr...	3.826897
The institute/ teachers use student-centric met...	3.795517
The institution provides multiple opportunities...	3.783103
The institution makes effort to engage students...	3.780690
Your mentor does a necessary follow-up with an ...	3.767931
The teachers identify your strengths and encour...	3.724483
Teachers are able to identify your weaknesses a...	3.718621
The teacher s approach to teaching can best be ...	3.718276
The institute takes an active interest in promo...	3.664828
The teaching and mentoring process in your inst...	3.652759
What percentage of teachers use ICT tools such ...	3.605172

	Classification
Questions	
Fairness of the internal evaluation process by ...	Excellent
How well were the teachers able to communicate?	Excellent
The teachers illustrate the concepts through ex...	Excellent
How well did the teachers prepare for the classes?	Excellent
Teachers inform you about your expected compete...	Good

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How much of the syllabus was covered in the class?          Good
Was your performance in assignments discussed w...          Good
Teachers encourage you to participate in extrac...          Good
Efforts are made by the institute/ teachers to ...          Good
The overall quality of the teaching-learning pr...          Good
The institute/ teachers use student-centric met...          Good
The institution provides multiple opportunities...          Good
The institution makes effort to engage students...          Good
Your mentor does a necessary follow-up with an ...          Good
The teachers identify your strengths and encour...          Good
Teachers are able to identify your weaknesses a...          Good
The teacher s approach to teaching can best be ...          Good
The institute takes an active interest in promo...          Good
The teaching and mentoring process in your inst...          Good
What percentage of teachers use ICT tools such ...          Good
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  pdf_pages.savefig(fig_question_classification)

All plots have been saved to 'Student_Satisfaction_Analysis_Plots.pdf'
-- Data Inspection and Analysis Complete ---

done-it <j_k.>