## Comprehensive Result Analysis

## Objectives

- Identify / select courses in which students are showing weak performance
- Set benchmarks for each year for continuous growth
- Corrective measures for each paper
- Identify weakness of each student and take corrective measures
- Alert students about their performance and inform parents


## Three parts

- Results of Class (Programme)
- Results of a course (paper)
- Results of Individual student


## Results of Class (Programme) Results of a Course (paper)

- Key Factors
- Pass Percentage (total)
- Grade Distribution- A+, A, B+, B......(numbers)
- Pass in each paper
- Grade Distribution- A+, A, B+, B......(numbers)
- Mean, Median, Skewness, Std deviation of each course (paper)


# Result Analysis 

## Average (Mean)

-45, 45

- Mean = 45
- 20, 70
- Mean = 45


## mean

The mean is the average or norm.

- Add up all of the values to find a total.
* Divide the total by the number of values you added together.

$$
2+2+3+5+5+7+8=32
$$

$$
32 \div 7=4.57
$$

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$$
\text { tesel by } 7
$$



$$
\begin{aligned}
& 1,3,3, \mathbf{6}, 7,8,9 \\
& \text { Median }=\underline{\underline{6}} \\
& 1,2,3, \mathbf{4}, \mathbf{5}, 6,8,9 \\
& \text { Median }=(4+5) \div 2 \\
&=\underline{4.5}
\end{aligned}
$$


-The median is the middle number in a sorted, ascending or descending, list of numbers and can be more descriptive of that data set than the average.
-The median is sometimes used as opposed to the mean when there are outliers in the sequence that might skew the average of the values.

## Skewness



## Positive skewness

- Mean (average) marks greater than median- more number of students are having less marks
- Positive skew values are not good


Positive Skew

## Negative skewness

- Mean (average) marks less than median- more number of students are having high marks
- Negative skew values are good


Negative
Skew

## Our targets- Results of Class (program)

- Average marks greater than 70 with a negative skew
- Maximum marks above 85
- Standard deviation less than 18
- Pass percentage- above 80



## Results of Individual Student

- Key factors
- Results of qualifying exam (plus two)
- Relative progress of student w. r. to qualifying exam
- Strength and weakness of each student


## Relative progress

- Plus two marks converted to rank
- Total marks in a semester converted to rank
- Relative progress $=$ Semester rank - plus two rank


## Z Score

- A z-score describes the position of a student's score in terms of its distance from the mean (class average) when measured in standard deviation units. The $\mathbf{z}$-score is positive if the value lies above the mean, and negative if it lies below the mean. A student with a positive $z$ score means he/she is performing above average.
- For aesthetic appeal, the z score has been multiplied by a factor 10 and the decimals are rounded off.


## Selection criteria for a course (paper)

| Selection criteria of courses |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Category | Fail $\%$ | skewness | Avg marks (\%) | Std dev | Max marks (\%) |
| $z$ | 10 | $>+0.5$ | $<55$ | $>18$ | $<80$ |
| $y$ | 10 | $>+0.5$ | $<55$ | $>18$ |  |
| $x$ | $>10$ | $>+0.5$ |  |  |  |

## Our targets (benchmark)- Results of Class (program)

- Average marks greater than 70 with a negative skew
- Maximum marks above 85
- Standard deviation less than 18
- Pass percentage- above 80



## Corrective measures for a paper

| Category | Actions |
| :---: | :--- |
|  | syllabus modifications |
| $\mathbf{Z}$ | additional crash course towards the beginning of exam |
|  | make compulsory - anwering of previous question papers |
|  | special coaching to weak learners |
| $\mathbf{y}$ | make compulsory - anwering of previous question papers |
| $\mathbf{X}$ | special coaching to weak learners |

## Sample results



## Individual result

## 1. B.A. Economics

## Part 1: Individual Student Result

Pass percentage: 83.05\%

| BA ECONOMICS |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REG NO | NAME | $\begin{aligned} & \text { PLUS } \\ & \text { TWO } \end{aligned}$ | CCI9UENG1AO $1$ | CC19UENG1AO $2$ | Second <br> Languag <br> e | CC19UECO1BO $1$ | $\begin{aligned} & \text { CC19UHIS1C0 } \\ & 1 \end{aligned}$ | TOTA <br> L | $\begin{array}{\|l} \hline \text { RAN } \\ \text { K } \\ \hline \text { FIRS } \\ \text { T } \\ \text { SEM } \end{array}$ | RAN <br> K <br> plus <br> TWO | RELATIVE <br> PROGRES <br> 5 | SIGNATUR <br> E |
| CCATAECRO <br> 4 | DITHI C N | $\begin{array}{r} 69.6 \\ 0 \end{array}$ | 54 | 68 | 85 | 85 | 70 | 362 | 8 | 47 | 39 |  |
| CCATAECR3 <br> 1 | EDWIN PETER | $\begin{array}{r} 53.5 \\ 8 \end{array}$ | 57 | 54 | 62 | 49 | 56 | 278 | 29 | 58 | 29 |  |
| CCATAECR4 <br> 4 | REMY SHIJU | $\begin{array}{r} 69.8 \\ 0 \\ \hline \end{array}$ | 50 | 66 | 78 | 62 | 64 | 320 | 18 | 46 | 28 |  |
| CCATAECR4 <br> 0 | NAVYA VARGHESE | $\begin{array}{r} 83.7 \\ 5 \end{array}$ | 59 | 62 | 68 | 79 | 74 | 342 | 14 | 35 | 21 |  |
| CCATAECR5 <br> 3 | TUNAMOL ROY | $\begin{array}{r} 89.3 \\ 3 \\ \hline \end{array}$ | 45 | 52 | 85 | 86 | 80 | 348 | 10 | 26 | 16 |  |
|  | LAKSHMI |  |  |  |  |  |  |  |  |  |  |  |

## Performance of Class

Part 2: Comprehensive Result Analysis


## Selection of paper

## Part 3: Category-wise distribution



## Z-score (Strength and Weakness of student)

## Part 4: Z-score

| CLASS AVERAGE | 46.9122807 | 48.56140351 | 62.82142857 | 56.800701754 | 58.59649123 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SUBIECT | CC19UENG1A01 <br> Credit: 3 <br> IA Max - 15 ESE <br> Max - 60 | CCI9UENG1A02 <br> Credit: 3 <br> IA Max - 15 ESE <br> Max - 60 | CC19UHIN1A07(1) <br> Credit : 4 <br> IA Max - 20 ESE <br> Max - 80 | CC19UECO1B01 <br> Credit: 5 <br> IA Max - 20 ESE <br> Max - 80 | CC19UHIS1C01 <br> Credit: 4 <br> IA Max - 20 <br> ESE Max - 10 |
| AFEELA MOHAMMED | -2 | 6 | 11 | 5 | 0 |
| ANNIE JOSEPH | 19 | 11 | 14 | 13 | 13 |
| DAVID P.W | 2 | -5 | -11 | -8 | -5 |
| DITHICN | 6 | 13 | 10 | 12 | 7 |
| JESINA JOY | -6 | -2 | -8 | -2 | -6 |
| JOMOL JOHN | -1 | 4 | 3 | 7 | 9 |
| LAKSHMI RAMACHANDRAN | 9 | 5 | 5 | 8 | 7 |
| PAWNA PRADEEPKUMAR | 10 | 7 | 12 | 9 | 12 |
| SANJAY T.P. | -11 | -11 | -18 | -16 | -11 |
| SNEHALK H | 2 | 5 | -2 | -4 | -8 |
| YAHYA BABU | 6 | 0 | -5 | -2 | 4 |

## PLG Activities

## PEER LEARNING GROUP (PLG) ACTIVITIES

Dear teachers, thanks for your cooperation on making peer learning groups (PLGs). Please conduct following activities to each PLG.

## Chief Mentor

1. Assign model/previous question paper to each group
2. Assign review paper on the specific subject to each group for Group presentation
3. Conduct a group presentation in presence of chief mentor based on the review paper.

## Mentor

## Mentor

1. Conduct an online peer group meeting (Conduct personal meeting with each mentee as first phase. In the second phase a group meeting should be conducted)
2. Assign a socio-economic subject for debate to each PLG and conduct the debate.

## Work flow

## Please follow the following work flow

a. Mentor - Conduct an online peer group meeting (Conduct personal meeting with each mentee as first phase. In the second phase a group meeting should be conducted)
b. Chief mentor- Assign model/previous question paper to each group
c. Chief mentor- Assign review paper on the specific subject to each group for Group presentation
d. Mentor- Assign a socio-economic subject for debate to each PLG and conduct the debate after fourth/second semester exams

## Note:

i) Question paper: End semester question papers or PG Entrance exam papers (Core \& Complimentary)
ii) Review paper- Paper on the core subject. Should not be too hard for the students
ii) Debate- sample subjects of current affairs - a) Education scenario after covid b) Flaws of Indian judicial system

