

## Analysing the Financial Health of a Public University in India

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### Abstract

The education sector comprises an important part of the development of an emerging economy. The study here attempts to enquire about the financial health of a public university representative of the higher education system in India. Using secondary sources of data mainly from the published reports and other university-based files, the financial scenario of the university is being analysed. Based on the financial analysis conducted, it can be suggested that the revenue receipts from the library is quite low and measures to increase it can be undertaken. As library forms an important part of a student's life, there must be reformation measures considered for its improvement and promoted as a new form among the students. This could help in generating more revenues from the students. The expenses based on miscellaneous sources are quite high and appropriate policies must be undertaken to keep a track of these expenses and find a permanent method for regaining it.

**Keywords-** Education; Students; Punjab; India; Teachers

### 1. Introduction

The higher education system in India is one of the world's largest with respect to the number of students enrolled after that of China and the United States of America. The education system in India begins with the fundamental right of "Right to Education" where every child in the age group of 6-14 years is entitled to receive free basic education (Sheikh, 2017). Every sector has its own ways to measure the performance of the individuals associated with the organisation. In the education sector this comparison can be done using a number of parameters such as the financial performance, the performance of the faculties and staffs in the job etc. (Spear, 2021) in his article identified key performance indicators with respect to the higher education system which are broken down into five broad categories-

1. Financial
2. Students Success
3. Admissions and Enrolment
4. Faculty and Staff
5. Facilities and Resources

All these five aspects can be identified as important upon being looked at. The financial aspect includes the various instructional costs involved such as the cost associated with the appointment of the part time and full time faculty members. Then there is the condition associated with administrative cost incurred for every student in the institute. There must be various budgets allocated for the organisation of various departmental programs that enhance the learning abilities of the students. The revenues and grants applicable within the reach of the students and the faculties is another financial concern. The institutes along with the above mentioned financial methods must keep track of the students who receive a scholarship or aid from the government units. Lastly, the institutes must track the tuition cost incurred by the students in a semester.

Another important parameter to judge the performance of a higher education institute is through the performance of the students. The success achieved by the students can depict the success levels of the institute. The outcome of the learning process of the students must be tracked thoroughly, one must monitor the courses completed by the students and their persistence rates. The measurement of the effectiveness of the programs given by the higher education institutes on the students must be kept a track of to measure the performance of the institutes.

The third point is to measure the number of students enrolling in the courses offered by the higher education institutes. The transfer rate of students, their acceptance rates, retention rates all must be kept in consideration to determine the performance of the institutes.

The faculties and staffs working for these higher education institutes form very important part of their performance measures. Hence, the various parameters associated with them must be maintained. This include the workload and productivity of the staff, turnover among the employees, the ration of faculty to students, the faculties working full time versus part time and the weekly contact hours for the faculties. In order to increase the performance of educational institutes it is important that the individuals who work for them must be good performers.

Lastly the facilities and resources provided must be well maintained. The utilisation of classrooms, the houses on campus and the sustainability measures must be well taken care of.

It is seen that with the growing higher education sector in India it is important to understand the situation of the same with respect to a number of internal parameters relevant to one of the prominent universities in India. The study here is hereby focused to understand the financial health of various Campuses of Guru Nanak Dev University (GNDU).

Guru Nanak Dev University was founded in 1969 to commemorate the 500th birth anniversary of Sri Guru Nanak Dev ji and since then it has made significant strides in the areas of academics, sports and culture. Government College Sathiala was handed over to the GND University in April 2011 and was renamed as GNDU Regional Campus, Sathiala. This Campus was established with the purpose to impart high quality education in the fields of Science, Technology and Management. The campus is driven to boost the standard of masses residing in the educationally deprived rural areas and is committed to offer value based and job oriented professional courses. The university had been the first one in the North India to start B.A., LL.B. (Honors) Five-Year integrated course after 10+2 at this Campus. This course has adopted the clinical methodology at the pattern of National University GATE 23 Law school. Research based education is an integral part of quality education which narrows down the gap between industry and academia. Keeping this objective in view Post graduate (M.Phil, M.A, L.L.M, MJMC) and Doctorate level (PhD) courses are also offered in this campus. Recently, M.Tech course has been added both in ECE and CSE disciplines by Engineering Department.

The study here would address the following research questions-

RQ1: How is the performance of the university in terms of the most relevant parameters?

RQ2: What can be concluded about the financial health of the university in total?

The next section puts forward the detailed literature review conducted for the purpose of the study.

## 2. Review of Literature

(Rivas et al., 2023) investigated the role of critical thinking on that of understanding and improving the academic performances. The need for critical thinking is realised by every entity in the present times. It is found that to enhance the academic performances, it is of utmost importance that critical thinking is incorporated into the method. The study conducted among the students have shown that it is in fact an essential component of the academic performance and can be effectively used to enhance their performances. (Hossain et al., 2022) talked about the evaluation of academic performances in the higher educational institutes but while incorporating a sustainable method of doing so. The study while adopting mixed methods is involved in doing an analysis of the trajectory movements. It is found that many of the academicians and students are not aware of the trajectory movements but it is found that these movements in the class, laboratories etc. can positively lead towards developing a way of enhancing the academic performances in a sustainable manner. (Rasheed et al., 2022) conducted a study to understand the role of online learning on that of the academic performance of the students in the higher educational institutes in Pakistan. The quantitative study consisting of 384 student responses across Pakistan have used the SERVQUAL model to determine the academic performances. From the statistical analyses being conducted it is found that the factors of the model i.e., tangibility, reliability, assurance, empathy and responsiveness are significantly associated with the performance of the students. It works as a source of motivation in increasing the academic performances of the students. (Sugiarti, 2022) did their study to understand the impact of Tri Dharma on the performance based monitoring results in the higher education sector. The study focuses on the relationship between the performance of the lecturer and that of the university at large and attempts to establish the relationship between the two. The study have found that the Tri Dharma method is 90% effective and can lead towards the betterment of the performance of the lecturers in the higher education institutes which would lead to the performance of the institute as a whole. (Azmi et al., 2023) conducted a study on the financial along with overall efficiency levels of Islamic educational institutes while managing to provide effective education. The environment for efficiency level is important in educational institutes as well as it requires to have a balanced budget in both the cases. There are a number of personal costs such as tuition fees and other curriculum fees coupled with investments costs such as those for facilities and infrastructure must be considered. (Woelfel et al., 2023) conducted a study to determine the balance between teaching and that of efficiency in the operating arenas of the academic institutions. The balance in both is quite essential in such institutions and by conducting interviews the study has been able to provide a number of interesting insights. It is seen that many factors such as financial, security,

reputation, along with their personal skills such as technical and preparation methods cause an impact on the balance created. (Hidayat et al., 2022) talked about the challenges of the educational institutes in this era of digital interventions when trying to achieve sustainability. The educational institutes does have a number of challenges coming their way as their operational activities are different from the others. It is found that political changes, socio-cultural and economic changes can lead to a number of differences in the process. The resources such as human, financial and technical needs to be utilised further effectively. (Veluri et al., 2022) investigated the role of analytics in being able to generate financial efficiency in managing the educational institutes. As the educational institutes present themselves as service providers in the market, it is important that their operational efficiency is maintained at a good level. The use of Machine Learning can significantly help to increase the financial as well as operational efficiency of the educational institutes. Tools such as artificial intelligence, neural networks and other such analytic tools.

### **3. Research Methodology**

The study here measures the financial health of the university as a whole by including the measures of revenue and expenditure incurred in the university. As the financial reports of the university needs to be evaluated in this regard, secondary sources of data are being collected for the purpose of the study. The secondary sources of data are analyzed which are collected from the published annual reports of the university and the other financial documents available and also consulting with the experts in the field. These are being analysed using special interpretive method by factual representation using data.

### **4. Data Analysis & Interpretation**

In order to analyse the financial health of these campuses, a number of factors have been identified from literature to be important determinants of the financial health of an educational institute. Based on these identified parameters, the study proceeds in this section and provides a detailed overview on the financial health of each of these campuses.

### 4.1 Revenue Receipts From Examination Fee

The first factor considered here is the revenue collected from the examination fees gathered from the students in each of the campuses. Examinations are an inevitable part of the educational institutes and the revenue collected through the examination fees of the students can generate a high amount of facilities for the campuses and improve their overall financial health.

Below are the tables and the graphs that shows the details of the revenue receipts collected from examination fees in the GNDU and the two regional campuses.

| Year           | M.C. AMRITSAR      | Regional Campus JALANDHAR | Regional Campus GURDASPUR | Regional Campus SATHIALA | Regional Campus SULTANPUR LODHI |
|----------------|--------------------|---------------------------|---------------------------|--------------------------|---------------------------------|
| 2008-09        | 8841000            | 1887000                   | 2977000                   |                          |                                 |
| 2009-10        | 9937000            | 1812000                   | 2807000                   |                          |                                 |
| 2010-11        | 11705000           | 1902000                   | 1996000                   |                          |                                 |
| 2011-12        | 15013000           | 2224000                   | 2027000                   |                          |                                 |
| 2012-13        | 19574000           | 4509000                   | 3054000                   |                          |                                 |
| 2013-14        | 29100000           | 3404000                   | 3895000                   |                          |                                 |
| 2014-15        | 35857000           | 5281000                   | 5234000                   | 1129000                  | 708000                          |
| 2015-16        | 41394000           | 6809000                   | 6800000                   | 1129000                  | 708000                          |
| 2016-17        | 40109000           | 9654000                   | 7479000                   | 1521000                  | 628000                          |
| 2017-18        | 39254000           | 10920000                  | 7048000                   | 1501000                  | 757000                          |
| 2018-19        | 38025000           | 10766000                  | 5136000                   | 1838000                  | 367000                          |
| <b>Average</b> | <b>26255363.64</b> | 5378909.09                | 4404818.18                | 1423600.00               | <b>633600.00</b>                |
| <b>C.V.</b>    | 50.83              | 67.46                     | 46.26                     | 21.10                    | 24.63                           |
| <b>C.G.R.</b>  | 18.98              | 23.44                     | 12.88                     |                          |                                 |
| <b>t-value</b> | 7.92**             | 10.50**                   | 4.16**                    |                          |                                 |

Table 5 - Revenue Receipts from Examination Fee

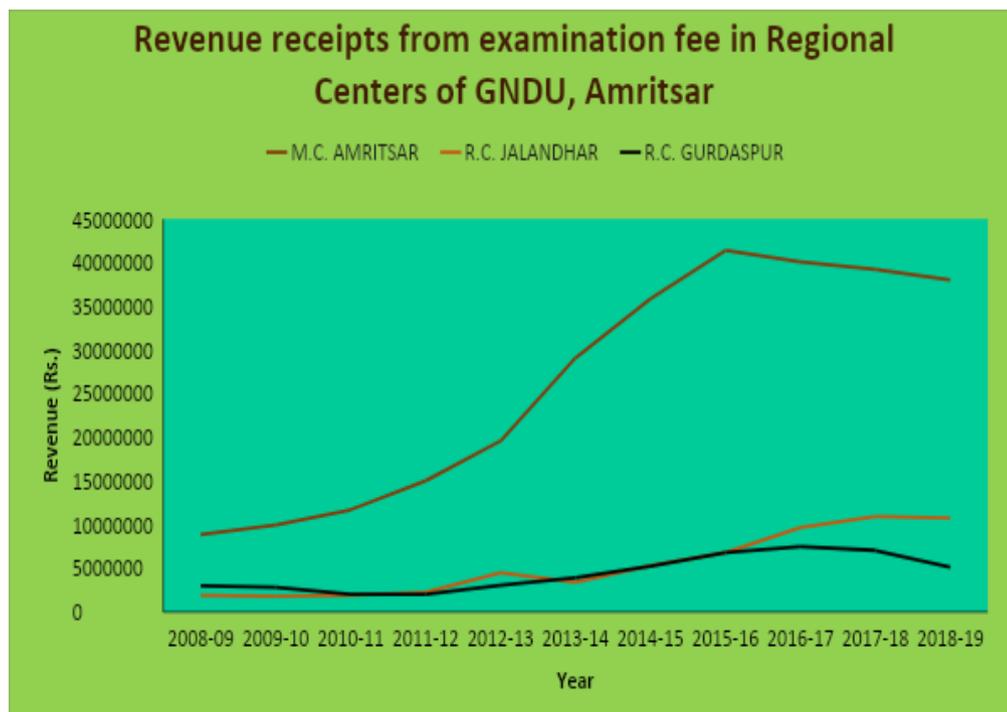


Figure 33 – Revenue Receipts from Examination Fee

**Interpretation-** From the above two analysis for the revenue receipts of examination fee it is found that for the campuses considered for the study and a time frame of 11 years, it is found that average for all the years is highest for that of Amritsar followed by regional campus of Jalandhar and then Gurdaspur. For Amritsar it is seen that the graph has gone up exponentially till the year 2016-17 but have seen a decline for the next two years. For the regional campus of Jalandhar however, the graph is seen to rise up for the upcoming period of time.

The following table and graph shows the proportionate share of examination fee observed among the three campuses considered it is found that the highest proportion of it is from the campus in Amritsar with an average of 2.54 followed by Jalandhar and Gurdaspur.

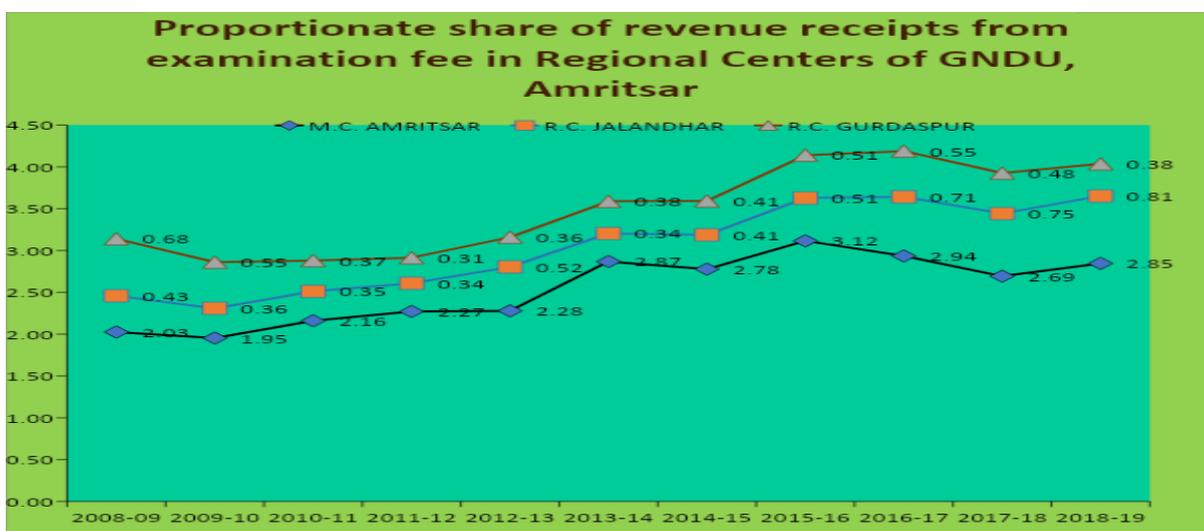


Figure 34 – Proportionate Share of Revenue Receipts from Examination Fee

#### 4.2 Revenue receipts from registration fee in GNDU

In the second stage the revenue receipts considered is that from the registration fee incurred from the students. The registration fee for students is to be utilised as a part of their learning and admission process in the campus and also forms an integral part of the financial health of the educational institutes such as that of GNDU.

| Year           | Enrollment Fee     | %age        |
|----------------|--------------------|-------------|
| 2008-09        | 37037000           | 8.49        |
| 2009-10        | 42127000           | 8.28        |
| 2010-11        | 45444000           | 8.39        |
| 2011-12        | 54226000           | 8.20        |
| 2012-13        | 64973000           | 7.56        |
| 2013-14        | 78343000           | 7.72        |
| 2014-15        | 82433000           | 6.385552926 |
| 2015-16        | 85578000           | 6.44        |
| 2016-17        | 85829000           | 6.28        |
| 2017-18        | 86762000           | 5.95        |
| 2018-19        | 92941000           | 6.96        |
| <b>Average</b> | <b>68699363.64</b> | <b>7.33</b> |
| <b>C.V.</b>    | <b>30.00</b>       |             |
| <b>C.G.R.</b>  | <b>10.06</b>       |             |
| <b>t-value</b> | <b>8.73**</b>      |             |

Table 7- Revenue Receipts from Registration Fee

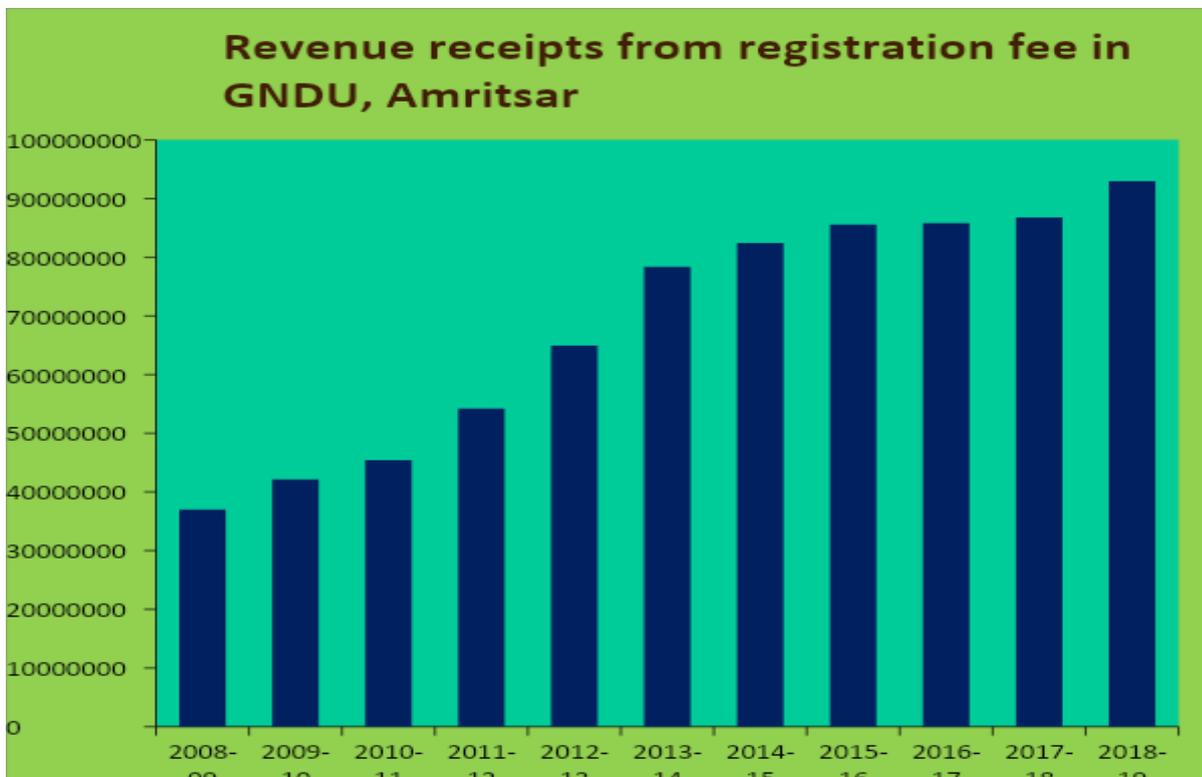
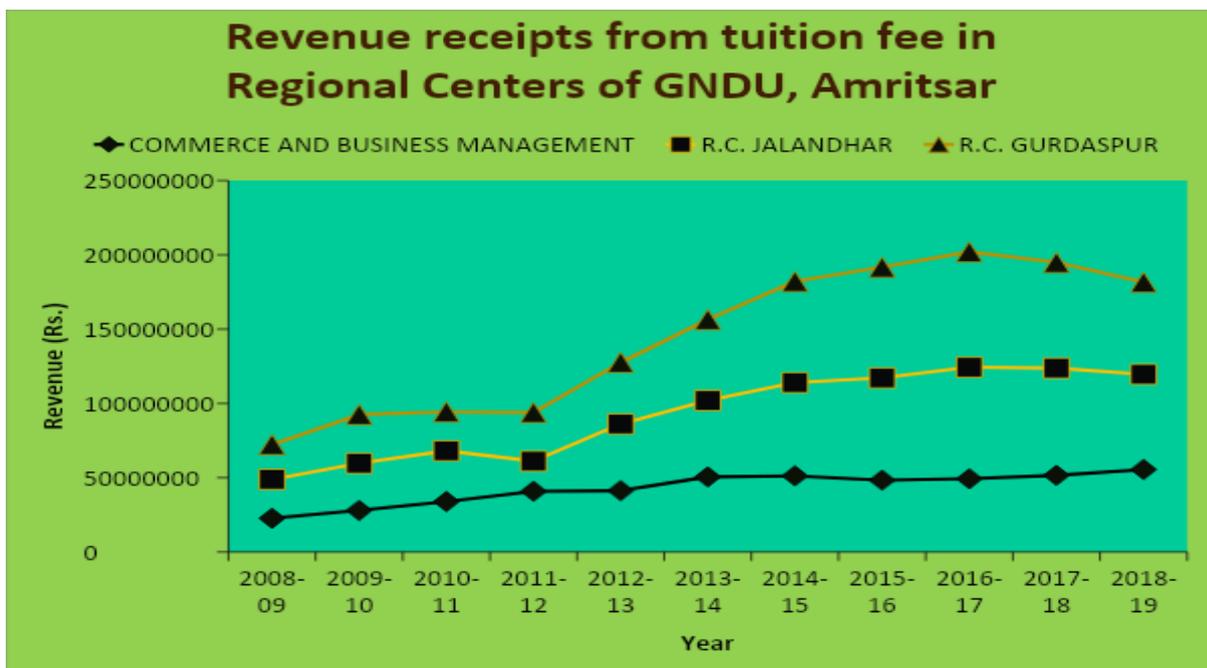


Figure 35 – Revenue Receipts from Registration Fee

**Interpretation-** The above data retrieved from the institute determines the average enrolment fee charged from the students as a part of their registration fees over the period of time considered in the study. While the average comes around at Rs. 6.8 crores, analysing the graph shown here it is quite evident that there have been a rise in the registration fee charged from 2008-09 till around 2015-16. For the next two years, the fee almost stayed at a same rate, for the last year of 2018-19 it saw an increase. The rise in the registration fee shows the growing resources offered to the students which in turn resulted in taking a higher registration fee in the coming years.

#### 4.3 Revenue receipts from tuition fee in GNDU

The third aspect considered in the financial analysis of the institute is the revenue received from the tuition fee taken from the students. Tuition fee is quite closely related to the registration fee and examination fee, but is taken from the students as a part of the education imparted to the students by the faculty members involved in the process. The following data shows the analysis of the tuition fee received from the campus in Amritsar and the other two considered regional campuses.



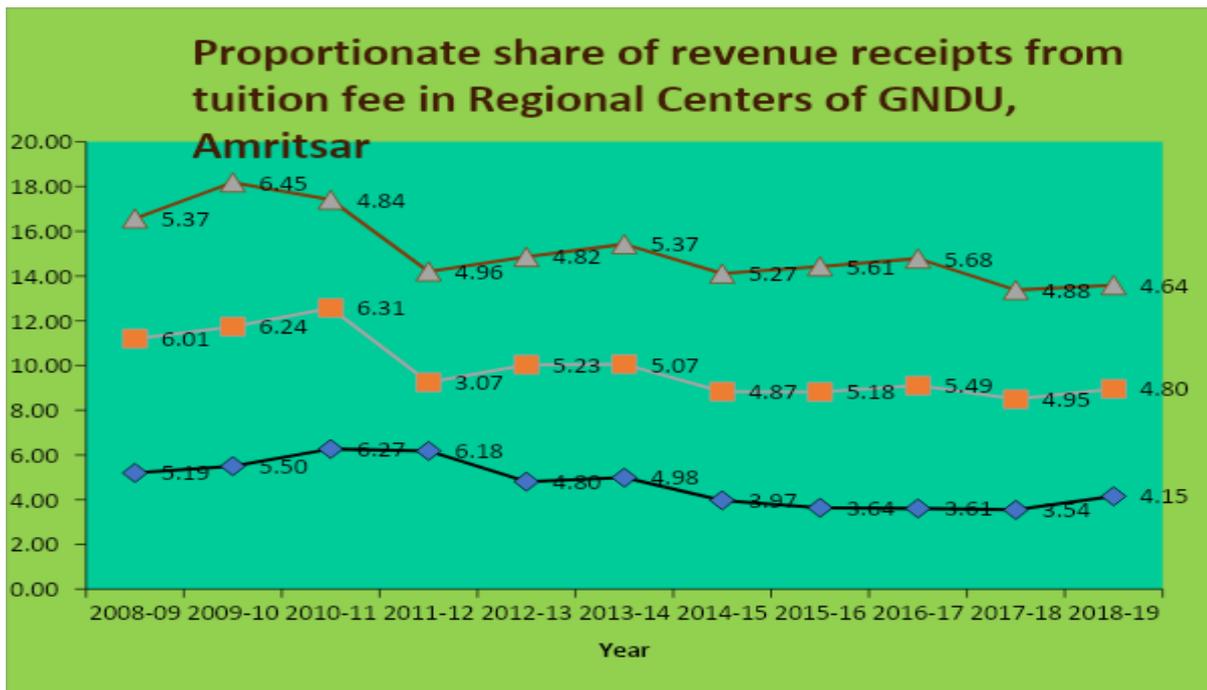


Figure 37 – Proportionate Share Revenue Receipts from Tuition Fee

Interpretation- The analysis here includes the fees taken for business and commerce and that for the admission fee of the students. While the average of the business and commerce fee over the period considered from 2008 to 2019 stands at Rs. 4.3 crores, it is interesting to note that the admission fee has been charged separately only for the years of 2008-09 and 2011-12. The regional campus of Gurdaspur in case of tuition fee is found to have the highest generation of revenue as compared with Jalandhar. Looking at the proportionate distribution of this particular category of revenue it can be found that the average for Gurdaspur lies at 5.26 and that for Jalandhar lies at 5.20.

#### 4.4 Revenue receipts from miscellaneous sources in GNDU

As the three important components of the fees related to the registration, examination and tuition from students is analysed, here, the revenue receipts from other miscellaneous sources for the students is analysed here.

| Year    | BHAI GURDAS | INTEREST    | SALE OF FORMS | RENT        | GRANT- IN-AID- | PUBLICATION |
|---------|-------------|-------------|---------------|-------------|----------------|-------------|
| 2008-09 | 105000      | 17242000    | 24189000      | 7058000     | 178188000      | 2990000     |
| 2009-10 | 103000      | 21318000    | 25203000      | 7629000     | 178188000      | 2724000     |
| 2010-11 | 85000       | 24279000    | 26757000      | 8856000     | 178188000      | 6012000     |
| 2011-12 | 86000       | 18378000    | 28386000      | 12083000    | 236990000      | 5186000     |
| 2012-13 | 100000      | 16651000    | 20382000      | 18252000    | 355485000      | 4635000     |
| 2013-14 | 113000      | 24378000    | 18346000      | 23652000    | 455485000      | 5579000     |
| 2014-15 | 105000      | 41343000    | 10437000      | 23517000    | 355485000      | 6022000     |
| 2015-16 | 109000      | 52196000    | 9038000       | 52196000    | 355485000      | 5536000     |
| 2016-17 | 99000       | 75748000    | 3929000       | 41583000    | 500000000      | 5463000     |
| 2017-18 | 100000      | 81414000    | 482000        | 42553000    | 495485000      | 5116000     |
| 2018-19 | 92000       | 89785000    | 573000        | 53217000    | 495485000      | 5152000     |
| Average | 99727.27    | 42066545.45 | 15247454.55   | 26417818.18 | 344042181.82   | 4946818.18  |
| C.V.    | 8.94        | 67.01       | 70.13         | 67.69       | 38.67          | 22.42       |
| C.G.R.  | 0.18        | 19.96       | -32.51        | 25.28       | 12.66          | 4.98        |
| t-value | 0.20        | 6.19**      | 6.44**        | 10.33**     | 6.51**         | 2.19        |

Table 10 - Revenue Receipts from Misc. Sources

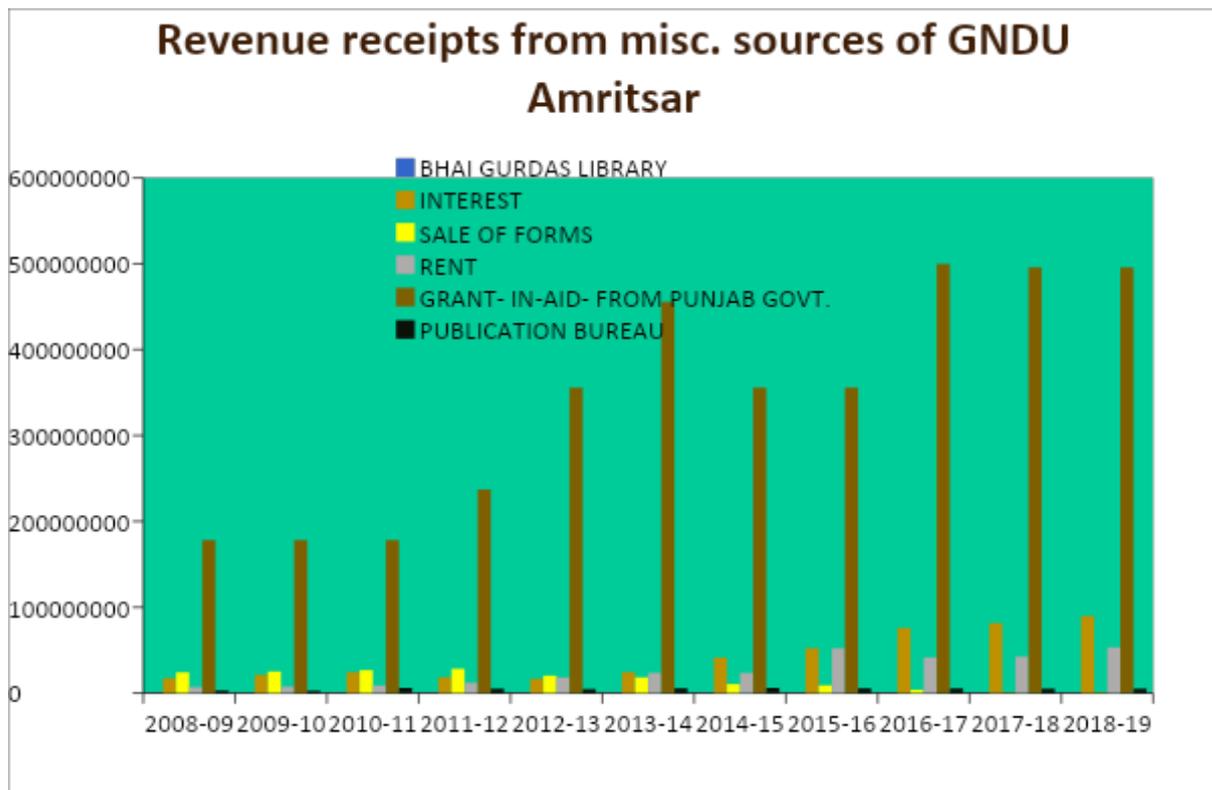


Figure 38 – Revenue Receipts from Misc. Sources

| Year    | BHAI GURDAS LIBRARY | INTEREST | SALE OF FORMS | RENT | GRANT- IN-AID- FROM PUNJAB GOVT. | PUBLICATION BUREAU |
|---------|---------------------|----------|---------------|------|----------------------------------|--------------------|
| 2008-09 | 0.02                | 3.95     | 5.54          | 1.62 | 40.83                            | 0.69               |
| 2009-10 | 0.02                | 4.19     | 4.95          | 1.50 | 35.02                            | 0.54               |
| 2010-11 | 0.02                | 4.48     | 4.94          | 1.63 | 32.89                            | 1.11               |
| 2011-12 | 0.01                | 2.78     | 4.29          | 1.83 | 35.85                            | 0.78               |
| 2012-13 | 0.01                | 1.94     | 2.37          | 2.12 | 41.39                            | 0.54               |
| 2013-14 | 0.01                | 2.40     | 1.81          | 2.33 | 44.90                            | 0.55               |
| 2014-15 | 0.01                | 3.20     | 0.81          | 1.82 | 27.54                            | 0.47               |
| 2015-16 | 0.01                | 3.93     | 0.68          | 3.93 | 26.76                            | 0.42               |
| 2016-17 | 0.01                | 5.54     | 0.29          | 3.04 | 36.59                            | 0.40               |
| 2017-18 | 0.01                | 5.59     | 0.03          | 2.92 | 33.99                            | 0.35               |
| 2018-19 | 0.01                | 6.72     | 0.04          | 3.98 | 37.09                            | 0.39               |
| Average | 0.01                | 4.07     | 2.34          | 2.43 | 35.71                            | 0.57               |

Table 11 - Proportionate Share of Revenue Receipts from Misc. Sources

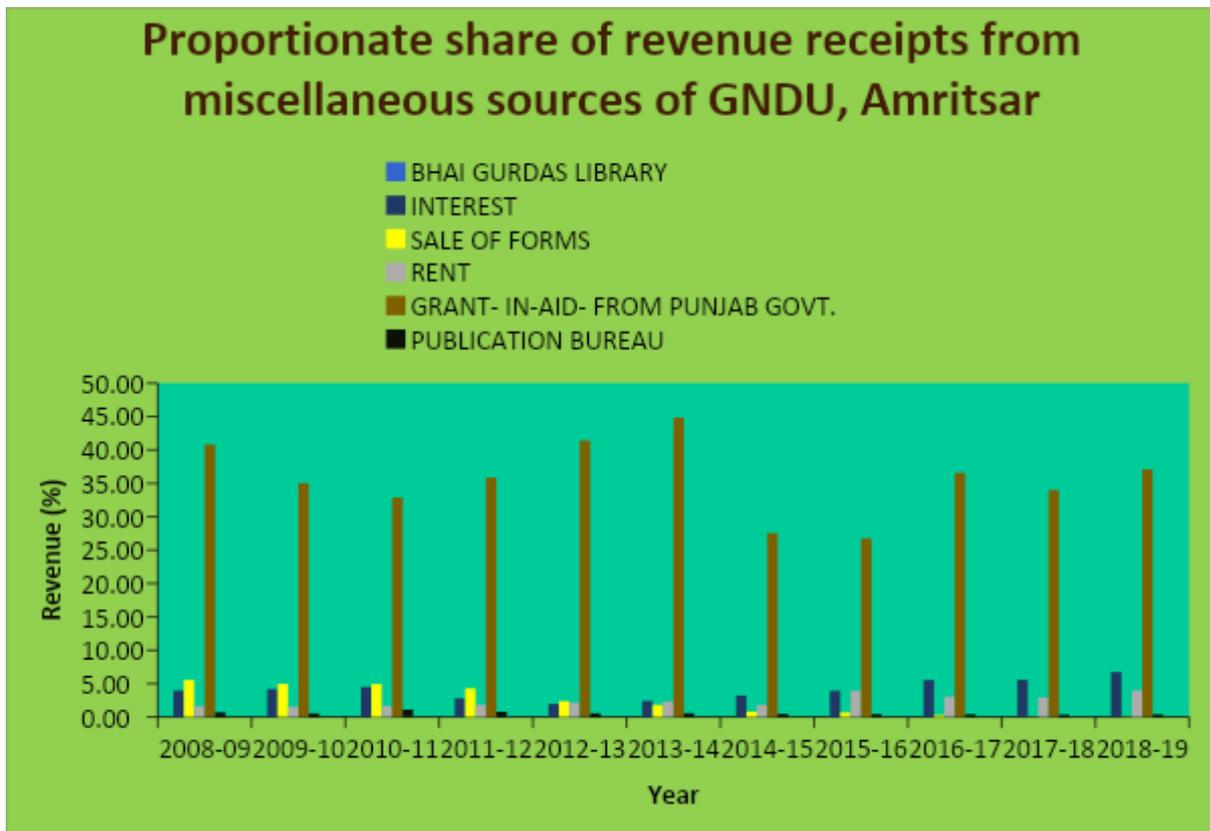


Figure 39 – Proportionate Share of Revenue Receipts from Misc. Sources

**Interpretation-** The miscellaneous forms include a number of factors such as rent, publication, grant-in-aid, library, interest and sale of forms. While considering the average gathered for each of these source of revenues over the years it is found that the lowest is collected for the library resources, while the highest generation of revenue is for the grant-in-aid purpose from the Punjab government. The grant-in-aid revenues have been experiencing quite up and down in their rates while the same can be observed in case of the library revenues as well. The other components mostly showed a healthy fluctuation in the rates. The highest proportion is held by the grant-in-aid revenues with 35.71% while library revenues account for only 0.01%.

#### 4.5 Revenue receipts from grants-in aid from UGC and others and total revenue receipts in GNDU

The next factor corresponds to the revenue receipts from the grant-in-aid provided from the government i.e., UGC and the total revenue receipts in general. This particular factor is the last from that of the revenue section where the upcoming sections would focus on the expenditure incurred by the institution.

| Year    | Grants       | %age  | Total Revenue | %age   |
|---------|--------------|-------|---------------|--------|
| 2008-09 | 82082582     | 18.81 | 436404582     | 100.00 |
| 2009-10 | 124447000    | 24.46 | 508825000     | 100.00 |
| 2010-11 | 142271810    | 26.26 | 541829810     | 100.00 |
| 2011-12 | 192183325    | 29.08 | 660988325     | 100.00 |
| 2012-13 | 218380012    | 25.43 | 858918012     | 100.00 |
| 2013-14 | 197693000    | 19.49 | 1014454000    | 100.00 |
| 2014-15 | 508651712    | 39.40 | 1290929712    | 100.00 |
| 2015-16 | 474720197    | 35.73 | 1328561197    | 100.00 |
| 2016-17 | 378803184    | 27.72 | 1366529184    | 100.00 |
| 2017-18 | 446978170    | 30.67 | 1457565170    | 100.00 |
| 2018-19 | 323938200    | 24.25 | 1335968200    | 100.00 |
| Average | 280922653.82 | 27.39 | 981906653.8   | 100.00 |
| C.V.    | 54.03        |       | 40.08813086   |        |
| C.G.R.  | 17.32        |       | 14.27         |        |
| t-value | 5.01**       |       | 9.43**        |        |

Table 12- Revenue Receipts from Grant-in-aid from UGC and others

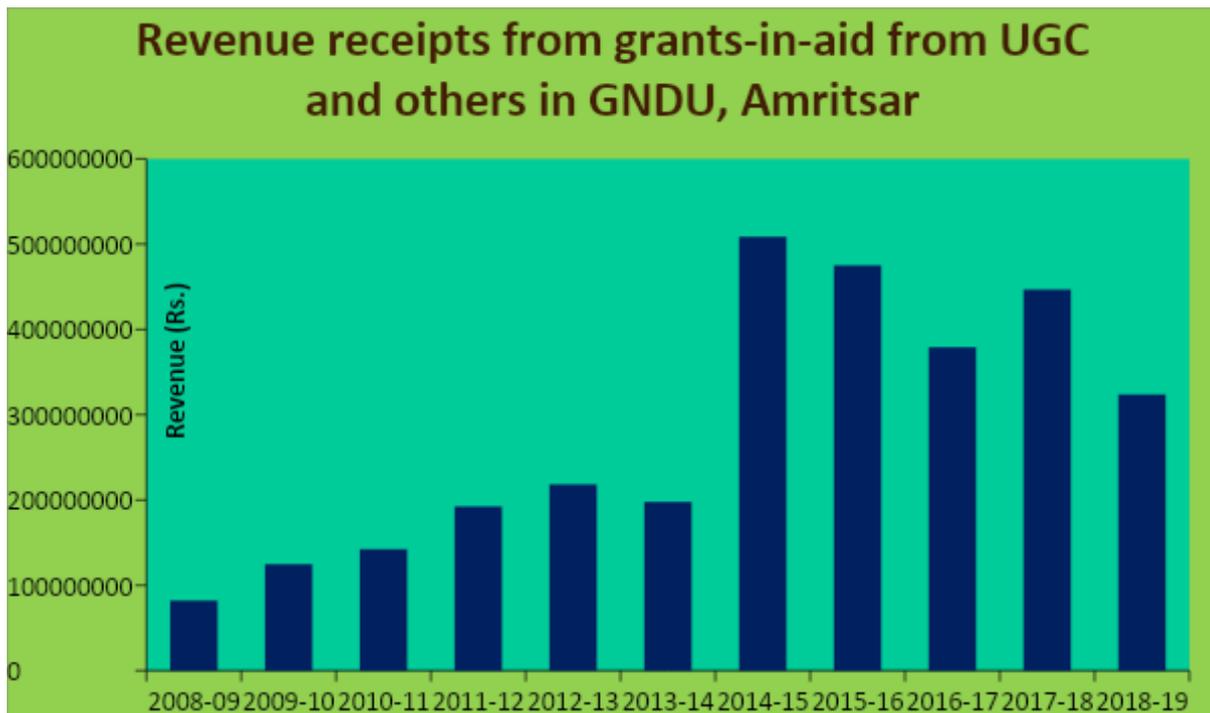


Figure 40 – Revenue Receipts from Grant-in-aid from UGC and others

**Interpretation** – The revenue receipts from grant-in-aid and the total revenue generated from both the students and other bodies has been analysed here. The figures when analysed over a period of time from 2008 to 2019 it is found that the total revenue had drastically increased in 2014-15. In the next year itself, it saw a decline and continued till 2016-17. In 2017-18 the revenue again increased followed by a slight decrease in the year 2018-19.

#### 4.6 Expenditure on general administration in GNDU

As the parameters measuring the revenues have been analysed, now in order to arrive at a comparative analysis and find the overall financial health of these campuses, it is important to look into the expenditures of the university as well. The first set of expenditures is observed for that of the general administration.

| Table 9: Expenditure on general administrator GNDU, Amritsar |             |      | (In Rs.)      |       |
|--|-------------|------|---------------|-------|
| Year   | V.C. OFFICE | %age | UNIV. OFFICES | %age  |
| 2008-09  | 5399000     | 0.98 | 146907000     | 26.60 |
| 2009-10  | 5924000     | 0.91 | 157344000     | 24.23 |
| 2010-11  | 7753000     | 1.06 | 205616000     | 28.02 |
| 2011-12  | 8832000     | 0.96 | 232944000     | 25.40 |
| 2012-13  | 9998000     | 0.87 | 268113000     | 23.33 |
| 2013-14  | 11908000    | 0.93 | 319840000     | 24.88 |
| 2014-15  | 12426000    | 0.83 | 349184000     | 23.43 |
| 2015-16  | 13489000    | 0.77 | 377836000     | 21.68 |
| 2016-17  | 13789000    | 0.83 | 408099000     | 24.64 |
| 2017-18  | 14450000    | 0.73 | 428019000     | 21.61 |
| 2018-19  | 15779000    | 0.80 | 470940000     | 23.93 |
| <b>Average</b>   | 10886090.91 | 0.88 | 305894727.27  | 24.34 |
| <b>C.V.</b>  | 32.45       |      | 36.40         |       |
| <b>C.G.R.</b>  | 11.24       |      | 12.66         |       |
| <b>t-value</b>   | 10.59**     |      | 14.46**       |       |

Table 13- Expenditure on General Administration

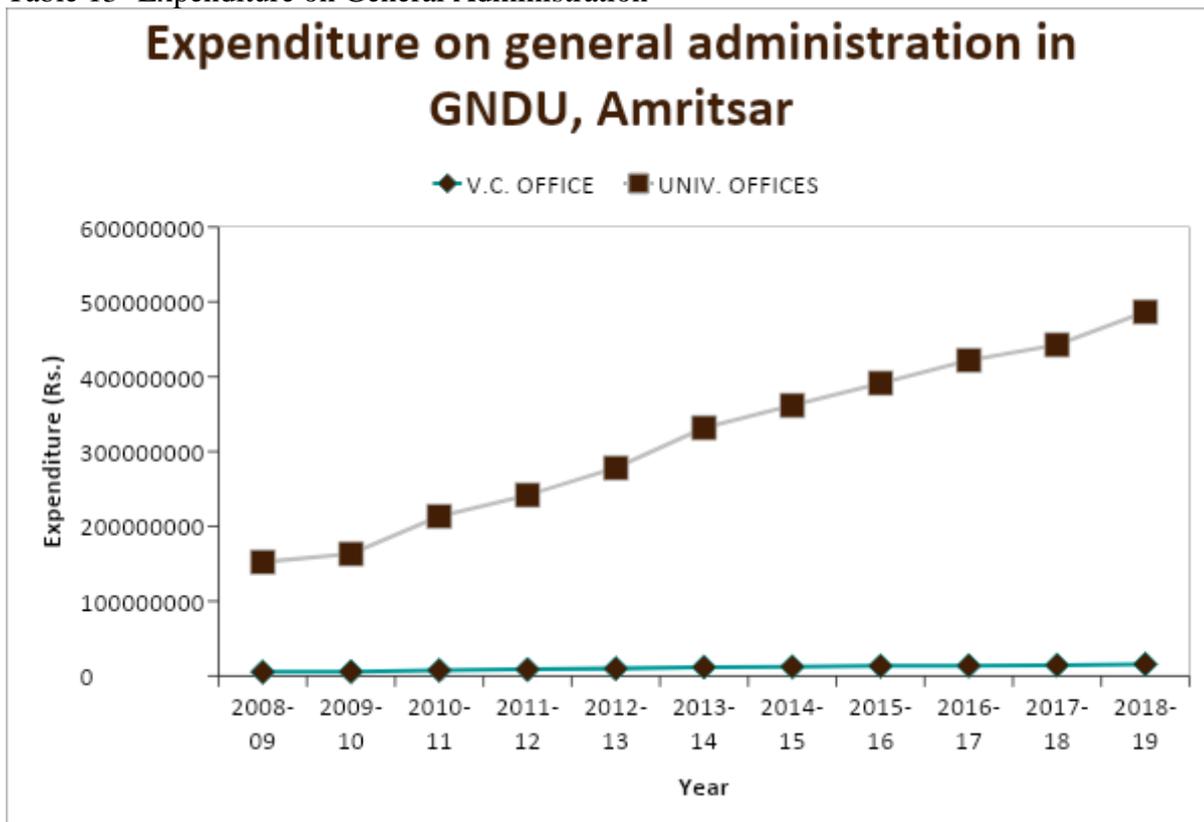


Figure 41 – Expenditure on General Administration

**Interpretation-** Observing the general administration expenditures in GNDU, it is seen that those incurred for the Vice Chancellor office expenses stands at a cumulative value of 32.48 while moving on to the expenses in the university offices, the expense stands at 36.40. Analysing the pattern over the

period considered, it is found that the expenses for VC office is almost at a similar stage with a minimum increase observed over the years. But for the university offices, the increase in the expenses is quite exponential and it has risen up quite significantly in the past eleven years.

#### 4.7 Expenditure on examination in GNDU

As the revenue generation from the examination fee has been calculated above, in the expenditure part an analysis of the expenditure on the conducting of examination for the students is examined here.

| Table 10: Expenditure on examination in GNDU,Amritsar(In Rs.) |                     |             |
|---|---------------------|-------------|
| Year  | Examination Fee     | %age        |
| 2008-09   | 53765000            | 9.73        |
| 2009-10   | 62415000            | 9.61        |
| 2010-11   | 65515000            | 8.93        |
| 2011-12   | 79140000            | 8.63        |
| 2012-13   | 92490000            | 8.05        |
| 2013-14   | 128760000           | 10.02       |
| 2014-15   | 156960000           | 10.53       |
| 2015-16   | 177960000           | 10.21       |
| 2016-17   | 18896000            | 1.14        |
| 2017-18   | 193960000           | 9.79        |
| 2018-19   | 193960000           | 9.86        |
| <b>Average</b>  | <b>111256454.55</b> | <b>8.77</b> |
| <b>C.V.</b>   | <b>55.57</b>        |             |
| <b>C.G.R.</b>   | <b>8.89</b>         |             |
| <b>t-value</b>  | <b>1.25</b>         |             |

Table 14 - Expenditure on Examination Fee

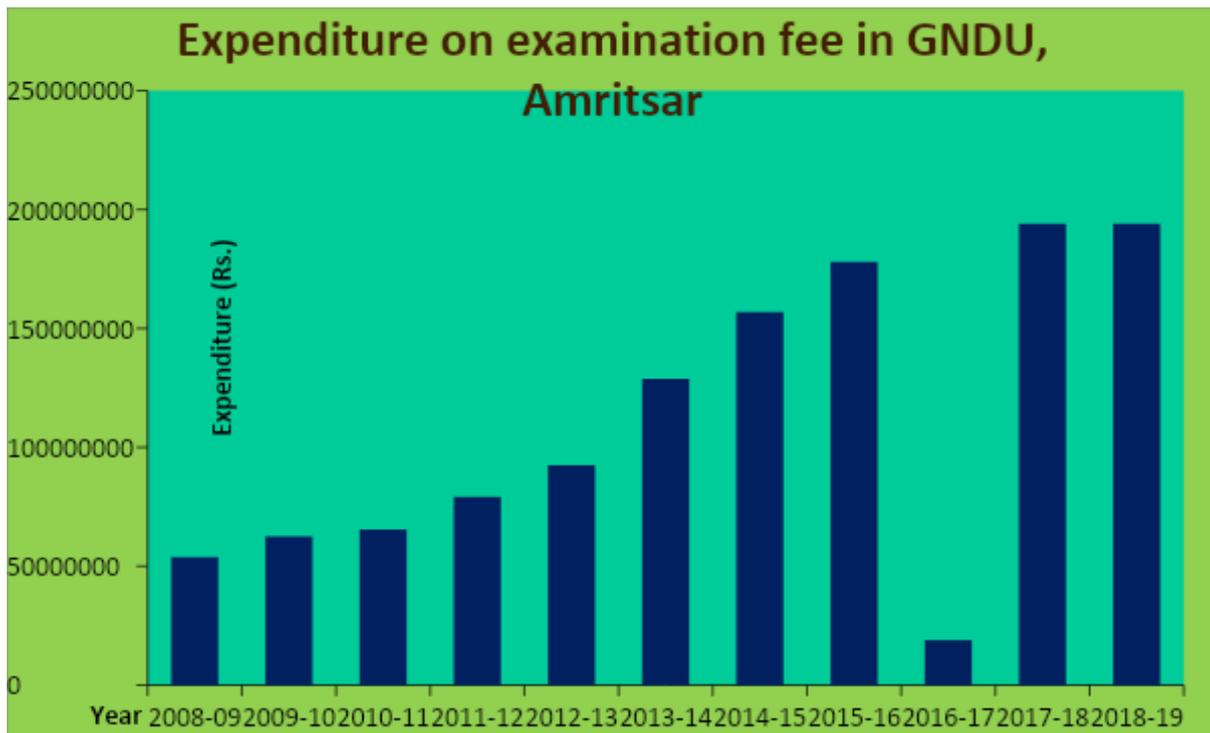


Figure 42 – Expenditure on Examination Fee

**Interpretation-** The expenditure incurred in examination purposes for the institute is found to increase from 2008-09 till 2015-16 in a consistent manner. However, it is interesting to note that in the year 2016-17 the expenses in examination had come down drastically and in the following two years can be found to rise up again.

#### *4.8 Expenditure on university teaching and research departments in GNDU*

The teaching and research practices forms one of the most integral part for the growth and development of an educational institute. While the grants-in-aid received from various sources are highly dependent on the research work conducted in the institutes, it is important that the expenditures in these cases are enquired for in the analysis.

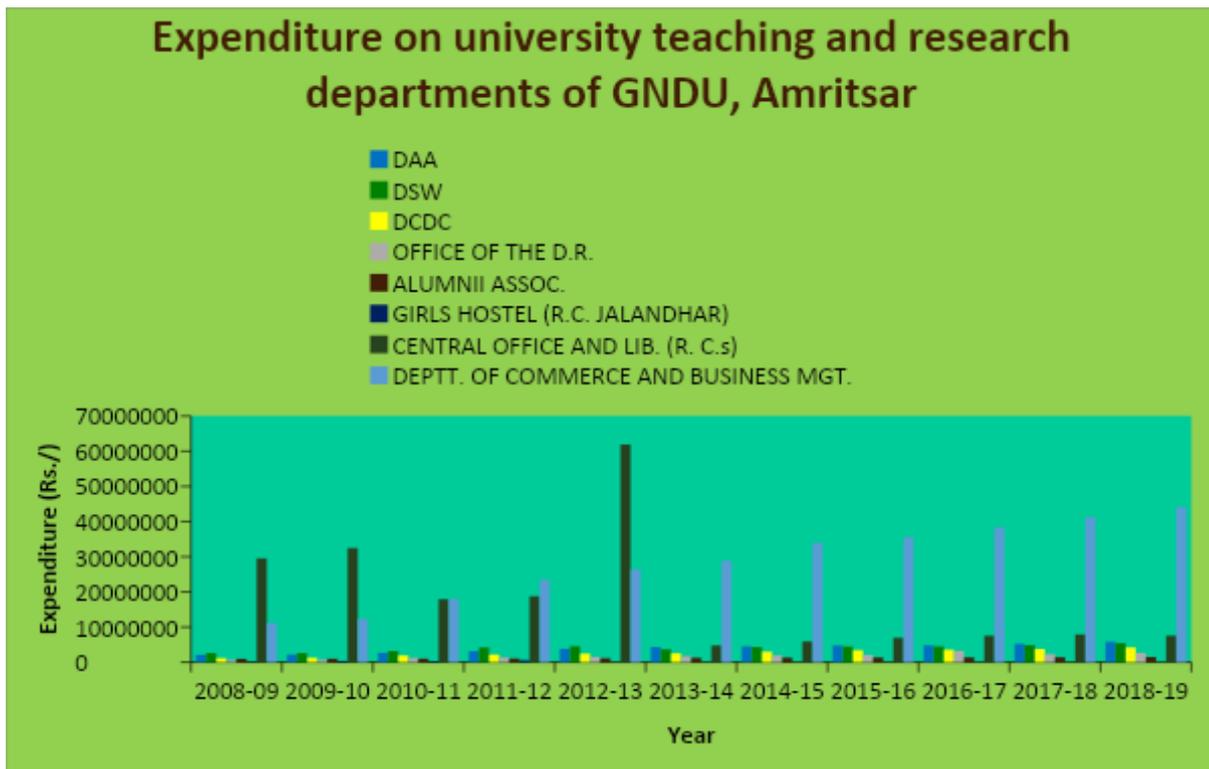


Figure 43 – Expenditure on University Teaching and Research Departments

**Interpretation-** The expenditures on the teaching and research departments are measured using a number of factors such as alumni associations, for the dean of academic affairs (DAA), Dean Student Welfare (DSW), Dean College Development Council (DCDC), the central office and library, the present hostels in the campuses etc. The analysis of the expenses show that the highest average expenses are noticed in case of the department of business and commerce and the lowest one in terms of the office and library. This shows that one of the departments which is commerce and business management is highly active in research and demands high amount of resources from the university.

#### 4.9 Expenditure on salaries of various regional centres in GNDU

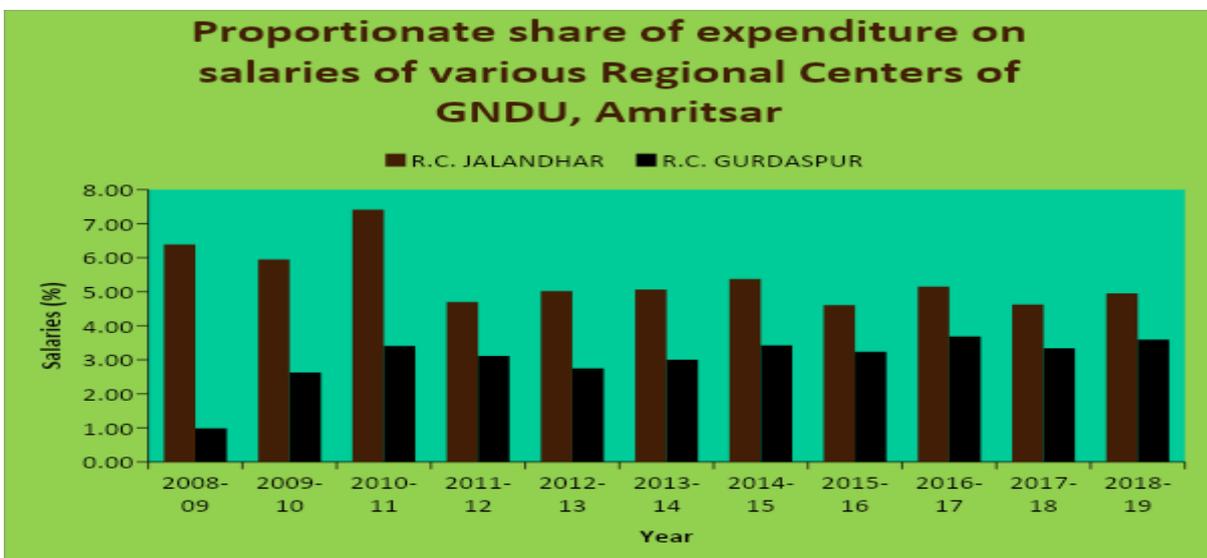
Another important expense for a university is the amount spent on paying the salaries of the employees in the various regional centres of it.

**Table 13: Expenditure on salaries of various regional centres in GNDU, Amritsar (In Rs.)**

| Year           | Regional Campus JALANDHAR | Regional Campus GURDASPUR | Regional Campus SATHIALA | Regional Campus SULTANPUR LODHI |
|----------------|---------------------------|---------------------------|--------------------------|---------------------------------|
| 2008-09        | 35281000                  | 5444000                   |                          |                                 |
| 2009-10        | 38606000                  | 17041000                  |                          |                                 |
| 2010-11        | 54354000                  | 24951000                  |                          |                                 |
| 2011-12        | 43107000                  | 28534000                  |                          |                                 |
| 2012-13        | 57640000                  | 31594000                  | 36538000                 |                                 |
| 2013-14        | 65156000                  | 38611000                  | 29335000                 | 30419000                        |
| 2014-15        | 80155000                  | 50985000                  | 37656000                 | 39797000                        |
| 2015-16        | 80208000                  | 56366000                  | 55508000                 | 43463000                        |
| 2016-17        | 85231000                  | 61060000                  | 58887000                 | 46925000                        |
| 2017-18        | 91599000                  | 66063000                  | 62973000                 | 49834000                        |
| 2018-19        | 97426000                  | 70771000                  | 66927000                 | 52883000                        |
| <b>Average</b> | <b>66251181.82</b>        | <b>41038181.82</b>        | 49689142.86              | 43886833.33                     |
| <b>C.V.</b>    | 33.20                     | 52.25                     | 29.90                    | 18.34                           |
| <b>C.G.R.</b>  | 10.98                     | 23.00                     |                          |                                 |
| <b>t-value</b> | 10.08**                   | 5.86**                    |                          |                                 |

**Table 14: Proportionate share of expenditure on salaries of various departments in GNDU, Amritsar (%)**

| Year           | Regional Center JALANDHAR | Regional Center GURDASPUR | Regional Center SATHIALA | Regional Center SULTANPUR LODHI |
|----------------|---------------------------|---------------------------|--------------------------|---------------------------------|
| 2008-09        | 6.39                      | 0.99                      |                          |                                 |
| 2009-10        | 5.94                      | 2.62                      |                          |                                 |
| 2010-11        | 7.41                      | 3.40                      |                          |                                 |
| 2011-12        | 4.70                      | 3.11                      |                          |                                 |
| 2012-13        | 5.02                      | 2.75                      | 3.18                     |                                 |
| 2013-14        | 5.07                      | 3.00                      | 2.28                     | 2.37                            |
| 2014-15        | 5.38                      | 3.42                      | 2.53                     | 2.67                            |
| 2015-16        | 4.60                      | 3.23                      | 3.18                     | 2.49                            |
| 2016-17        | 5.15                      | 3.69                      | 3.56                     | 2.83                            |
| 2017-18        | 4.62                      | 3.33                      | 3.18                     | 2.52                            |
| 2018-19        | 4.95                      | 3.60                      | 3.40                     | 2.69                            |
| <b>Average</b> | <b>5.38</b>               | 3.01                      | 1.94                     | <b>1.42</b>                     |



**Interpretation-** For the two regional campuses of Jalandhar and Gurdaspur considered here it is seen that the expenditure on salaries is higher for the campus in Jalandhar as compared to that of Gurdaspur. While the average proportion for Jalandhar of 5.38, for Gurdaspur it stands at 3.01. Over the years the expenses for Jalandhar is found to show a decreasing trend in the proportionate distribution of salaries

while for Gurdaspur is found to fluctuate but within smaller limits. Moreover, the rise in the expenses for salaries in both the campuses over the years is quite evidently observed from the graph shown above.

#### 4.10 Expenditure on other heads in GNDU

With covering the various important expenditures on the institute, an overall expenditure on other heads is captured in this section.

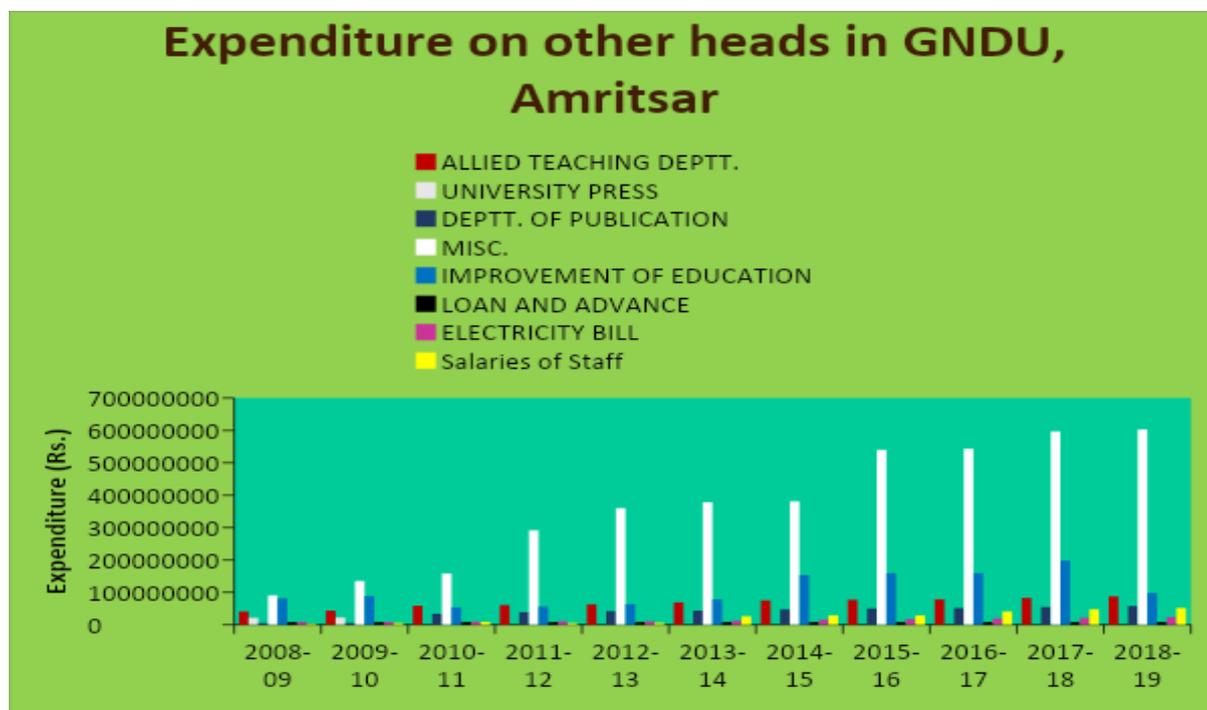
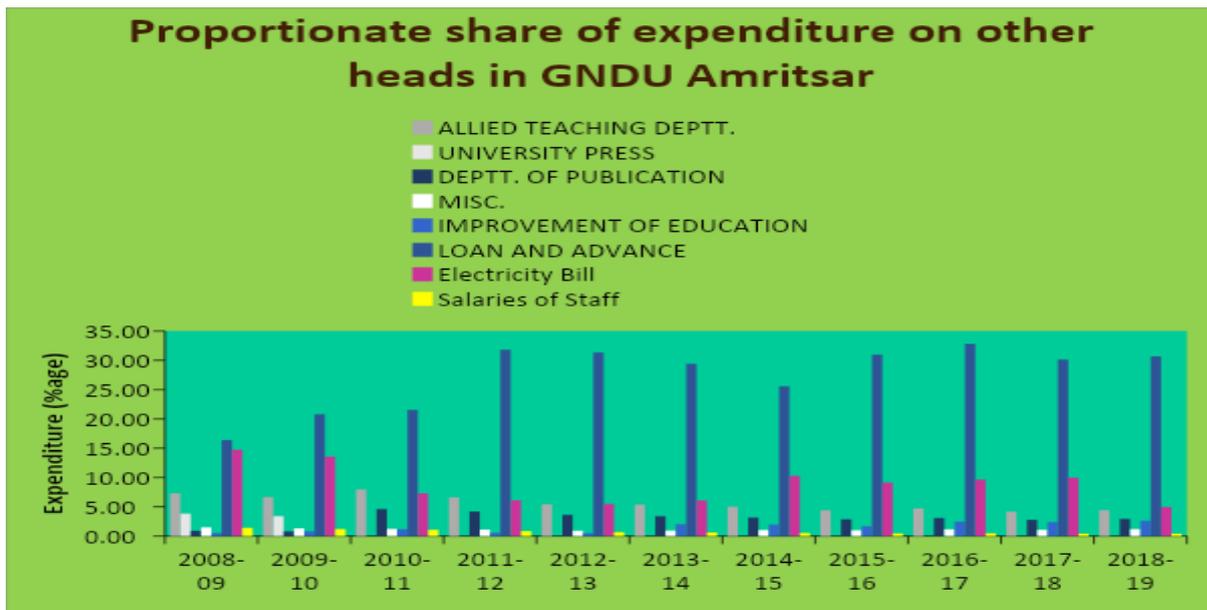


Table 16: Proportionate share of expenditure on other heads in GNDU, Amritsar (%)

| Year    | ALLIED TEACHING DEPTT. | UNIVERSITY PRESS | DEPTT. OF PUBLICATION | MISC. | IMPROVEMENT OF EDUCATION | LOAN AND ADVANCE | ELECTRICITY BILL | SALARIES OF STAFF | TOTAL  |
|---------|------------------------|------------------|-----------------------|-------|--------------------------|------------------|------------------|-------------------|--------|
| 2008-09 | 7.32                   | 3.83             | 0.90                  | 1.49  | 0.51                     | 16.38            | 14.73            | 1.41              | 100.00 |
| 2009-10 | 6.67                   | 3.40             | 0.79                  | 1.32  | 0.80                     | 20.79            | 13.55            | 1.20              | 100.00 |
| 2010-11 | 7.97                   | 0.00             | 4.60                  | 1.22  | 1.17                     | 21.53            | 7.31             | 1.06              | 100.00 |
| 2011-12 | 6.61                   | 0.00             | 4.18                  | 1.10  | 0.56                     | 31.80            | 6.12             | 0.85              | 100.00 |
| 2012-13 | 5.43                   | 0.00             | 3.62                  | 0.91  | 0.50                     | 31.32            | 5.49             | 0.68              | 100.00 |
| 2013-14 | 5.37                   | 0.00             | 3.38                  | 0.93  | 2.02                     | 29.40            | 6.08             | 0.61              | 100.00 |
| 2014-15 | 5.02                   | 0.00             | 3.15                  | 1.03  | 1.96                     | 25.57            | 10.28            | 0.52              | 100.00 |
| 2015-16 | 4.41                   | 0.00             | 2.86                  | 0.99  | 1.66                     | 30.98            | 9.12             | 0.45              | 100.00 |
| 2016-17 | 4.71                   | 0.00             | 3.08                  | 1.15  | 2.47                     | 32.81            | 9.63             | 0.47              | 100.00 |
| 2017-18 | 4.17                   | 0.00             | 2.75                  | 1.06  | 2.39                     | 30.12            | 9.97             | 0.39              | 100.00 |
| 2018-19 | 4.43                   | 0.00             | 2.92                  | 1.19  | 2.62                     | 30.65            | 4.97             | 0.40              | 100.00 |
| Average | 5.64                   | 0.66             | 2.93                  | 1.13  | 1.51                     | 27.40            | 8.84             | 0.73              |        |



**Interpretation-** The other head of expenses considered in this section ranges from university press to the loans and advances, the salaries of other staff members, the electricity bills, expenses in the improvement of education, for publication, allied teaching departments and other such miscellaneous expenses incurred. From these considered parameters it is found that the highest cumulative value is for the salaries of staff and the lowest is in terms of miscellaneous. For the proportionate distribution, loans and advances holds the highest one with 27% while the lowest is for university press with only 0.66%

**4.11 Ranking pattern of 5 highest and 5 lowest source of revenue on the basis of average proportionate share**

Once all the revenues and expenditures for the campus of Amritsar and the regional campuses of Jalandhar and Gurdaspur, a ranking has been provided to the sources of revenue for the overall analysis conducted. The tables below show the proportions for each of the sources and the top five and lowest five rankings for both revenues and expenditures.

| Table 17: Ranking pattern of 5 highest and 5 lowest sources of revenue on the basis of average proportionate share |            |                |               |  |
|--|------------|----------------|---------------|--|
| Sources of Revenue   | Proportion | 5 Highest Rank | 5 Lowest Rank |  |
| SCHOLARSHIPS FROM PUNJAB GOVT.   | 34.53      | 1              |               |  |
| GRANT IN AID FROM UGC & OTHERS   | 26.47      | 2              |               |  |
| ENROLLMENT FEE   | 7.09       | 3              |               |  |
| Tuition Fee R.C. GURDASPUR   | 5.09       | 4              |               |  |
| Tuition Fee R.C. Jalandhar   | 5.03       | 5              |               |  |
| BHAI GURDAS LIBRARY  | 0.01       |                | 1             |  |
| Examination Fee R.C. SULTANPUR   | 0.02       |                | 2             |  |
| ADMISSION FEE  | 0.03       |                | 3             |  |
| Examination Fee R.C. SATHIALA  | 0.05       |                | 4             |  |
| Tuition Fee R.C. Sultanpur Lodhi   | 0.47       |                | 5             |  |

Table 20 – Ranking for Revenue

| Table 17: Ranking pattern of 5 highest and 5 lowest heads of expenditure on the basis of average proportionate share |            |                |               |  |
|--|------------|----------------|---------------|--|
| Sources of Revenue   | Proportion | 5 Highest Rank | 5 Lowest Rank |  |
| Miscellaneous  | 28.15      | 1              |               |  |
| University offices   | 25.00      | 2              |               |  |
| Improvement of Education   | 9.08       | 3              |               |  |
| Examination fee  | 9.01       | 4              |               |  |
| Salaries RC Jalandhar  | 5.53       | 5              |               |  |
| Girls hostel, RC Jalandhar   | 0.02       |                | 1             |  |
| Allumni Association  | 0.11       |                | 2             |  |
| Office of the D.R.   | 0.14       |                | 3             |  |
| DCDC   | 0.22       |                | 4             |  |
| DAA  | 0.33       |                | 5             |  |

Table 21 – Ranking for Expenditure

**Interpretation-** For the revenue generation across the three campuses considered the top five includes scholarships from the Punjab government or the grant-in-aid received by the university followed by those received from UGC, enrolment fee comes third and the fourth and fifth components are from the tuition fees taken from regional campuses of Gurdaspur and Jalandhar respectively. For the lowest rankings from revenue the very first one if that generated from the library followed by certain parameters from the other two regional campuses.

For the expenditure purpose, the top five includes those from miscellaneous sources, followed by university offices, improvement of education, examination conduction and the salaries for the regional

campus in Jalandhar. The highest expenditure is for the girls hostel located in the regional campus of Jalandhar followed by alumni association, and the offices of DR, DCDC and DAA respectively.

## 6. Conclusion

The main aim of the study is provide an overview on the financial health of the university. To arrive at a conclusion about the financial functioning of the university, the revenues of the university has been compared with that of the expenditures to rank the top five and bottom five revenue generating areas for the university and the top five and bottom five expenditure incurring areas. Both the revenue and expenditures are calculated over a period of eleven years which ranges from 2008-09 to 2018-19. The revenue receipts have been gathered for the registration fee, examination, fee, tuition fee and other sources such as grants-in-aid received etc. For measuring the revenues received the proportionate share in percentage for each of the parameters is used along with other measures such as CAGR and T-values. The average of the revenues and expenditures over the period of eleven years is also calculated for this purpose. The expenditures are measured in terms of conducting examinations, salaries, in maintaining the general administration, for conducting research and other teaching aids and certain other heads. The revenues and expenditures after being analysed found that for revenues, the top five income generating options include the scholarships received by students from the government of Punjab, the grant-in-aid received for research and other activities, the enrolment fees received and the tuition fees especially from the regional centres of Jalandhar and Gurdaspur. The top lowest revenue generating source here is however that from library. For the expenditure part the top five includes expenses of miscellaneous sources, the university offices, the one spent in improving the education in the university, the examination and for the salaries to be paid especially to the ones in the Jalandhar campus. The lowest expenses however is from the girls hostel in Jalandhar.

These rankings show that the revenue generation is quite high from the main sources such as UGC and such other boards which can help the university earn a long term income. But the revenue from library being the lowest generates a scope for improvement in the future by including new resources and taking the advantage of technology in establishing a digital library for the students. The expenses pertaining to miscellaneous sources are quite high. This must be scrutinised in detail to find the main component that causes the expenses to such higher levels. With the other expenses there are revenues being generated

from them but for miscellaneous sources it is important to identify the main components and separate them as a new component and analyse the revenue generating scope for these expenses.

## 6. Scope for Further Research

Based on the financial analysis conducted, it can be suggested that the revenue receipts from the library is quite low and measures to increase it can be undertaken. As library forms an important part of a student's life, there must be reformation measures considered for its improvement and promoted as a new form among the students. This could help in generating more revenues from the students. The expenses based on miscellaneous sources are quite high and appropriate policies must be undertaken to keep a track of these expenses and find a permanent method for regaining it. The study overall have provided a very high number of policy reformation ideas through its findings and must be implemented for the betterment of the university. In the future, conceptual models can be formulated based on these financial parameters noticed. Also as GNDU is a public university, there can be a comparative analysis conducted with that of a private university in India.

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