How to Solve Questions Based on Data Interpretation NET exam

Myth: There are Students who think “I will solve at least 10/10 Question from DI and Maths based Reasoning”; But due to lack of Practice/Formula & Proper Guide about how to solve them in given time they waste ample amount in the calculation and solving these Question.

**DI based question asked in NTA UGC NET Exam is not as much as tough which is asked in Bank PO/SO exams. The difficulty is also not as asked in MBA entrance exam but it is somewhat of the mediocre level (Not Too Easy; Nor Too Tough !)**

**Data Interpretation NET Exam Paper Pattern Overview: How to prepare?**

In UGC NET exam, Based on Last 10 Year Papers we see there will be (5-6) Questions Based on DI. Most of the cases, they will be based on Table & PI/Bar Chart. On very few occasion question were based on two tables. So...Let’s have look at the number of question asked in the last 10 years so that you can plan your focus area of Study

**Below is the list of the name of the exam along with no of the question asked in the UGC NET EXAM.**

- Dec 2019 (Similar Pattern Based on Tabular and BAR Chart )
- June 2019 (Mostly 5 MCQ Question based on Percentage and Average on Tabular Data )
- Dec 2018 (Mostly 5 MCQ Question based on Questions based on Basic math operation)
- July 2018(5 MCQ Based on production, exports and per capita consumption of rice- Again Basic Math Operation)
- Nov 2017 (5 MCQ Based on Number of registered vehicles in India and India’s population- Basic Math Operation)
- January 2017 (6 MCQs Based on Two Data Tables)
- August 2016 (6 MCQs Based on Two Data Tables) (Re-test)
- July 2016 (6 MCQs Based on Two tables. Questions based on Basic math operation)
- December 2015 (6 MCQs Based on Tabular data on Population Growth)
- June 2015 (6 MCQs Based on Tabular data. questions are based on avg & %)
• December 2014 (6 MCQs based on CO₂ emissions. Mostly on % growth and relative changes)
• June 2014 (6 MCQs on Irrigation Data Interpretation. Mostly again based on %)
• December 2013 (6 MCQs on Foreign Tourist Arrivals Data Interpretation. Most of the Questions are based on relative comparisons.)
• September 2013 (4 MCQs on Data production of energy Interpretation) (Re-test)
• June 2013 (6 MCQs on Major Horticulture Crops Tabular Data Interpretation)
• December 2012 (6th MCQs on Government Expenditures on Social Services Data Interpretation)
• June 2012 (2 MCQs on based on total electricity generation PI Chart Data Interpretation)
• December 2011 (2 MCQs on based total CO₂ emissions PI Chart Data Interpretation)
• June 2011 (3 Question Based on Numerical Values Data Interpretation)
• December 2010 (5 MCQs based on the production of electronic items Data Interpretation)
• June 2010 (3 MCQs Based on Bar Chart Data Interpretation)

The Significant change we see in the paper pattern over years is that previously there is 5-6 Question based out of 1 Dataset. However, now we see 3-3 Question on two type of data set. Also in the last few year questions were asked mostly based on tabular data. This is a little tricky as this will be time-consuming for candidates to analyse two datasets and solve 3 question based on each data set.

By the way below is the Official Syllabus for Data Interpretation Topics for UGC NET EXAM (You can read other topics by clicking on the links to open notes in the new page.)

Unit-VII Data Interpretation

Data Interpretation Tricks for UGC NET exam: How to prepare well?

We will also discuss in details how to solve toughest DI .....and we will solve some practice set after reading the article.

I have compiled from various sites....a good study material for you in one place.

Hope you will enjoy it....First, we will discuss various tips and tricks for solving DI/Data interpretation....So get ready for DI solving tricks and tips.

What kind of Data set can we expect in Exam?

Data can be written or represented in 4 Forms(Data can be presented either through words as in case-lets or through pictorial methods. Out of all the types of pictorial charts, table, bar chart, pie chart and line chart are most frequently used types)
**Tricks to Crack Data Interpretation**

- The aim is to test not only quantitative skill but also relative, comparative and analytical ability.
- The crux of the matter is to find a relationship between the two tables or graphs before attempting the questions.
- Data Interpretation questions are based on the information given in tables and graphs. These questions test your ability to interpret the information presented and to select the appropriate data for answering a question.
- Get a general picture of the information before reading the question.
- Avoid lengthy calculations generally, data interpretation questions do not require to do extensive calculations and computations. Most questions simply require reading the data correctly and carefully.
- Breakdown lengthy questions into smaller parts and eliminate impossible choices.
- Answer the questions asked and not what you think the questions should be.
- Tables are often used in reports, magazines and newspaper to present a set of numerical facts.

**FEW IMPORTANT AREAS**

**Percentage and Ratio applications:** These two chapters from Quantitative Aptitude has a certain role to be played in DI calculation. This has been seen most of the question in UGC NET exam are based on Percentage and Average Calculation. A ratio is another important topic to care about.

- Master your Percentage, Ratio, Profit and Loss, Average, Interest Calculations
- You should Master your two-digit addition which will enhance your calculation speed
- Some other necessary things are learned multiplication tricks for three/four digits, Square, Cube.
- Avoid Unnecessary Calculation

**Approximation techniques:** A very large number of these questions check your ability to compare or calculate fractions and percentages. If you sit down to actually calculate the answer, you would end up spending more time than required. Here are a few ideas that you can use for approximation.

- Learn the concept of Approximations and Estimations. These are very important to solve DI questions very fast.
When trying to calculate (approximate) a fraction \( \frac{p}{q} \), add value to the denominator and corresponding value to the numerator before calculating (approximating).

If the percentage growth rate is \( r \) for a period of \( t \) years, the overall growth rate is approximate: \( rt + t \cdot (t-1) \cdot r^2 / 2 \). Follow RS Aggrawal Book

**Calculation Techniques specific to the data sets:** There are calculation techniques especially in case of Pie Chart, Line Chart and Bar chart that one should know to reduce the calculation time.

**Pie Chart** is a circular form of Data representation. In this, the circle is divided into sectors either percentwise or degree-wise. In the per cent-wise division, the total area of the chart is taken to be 100% and in degrees division, the total area of the chart is taken to be 360°.

**Don’t use calculators while Practice:**

**Solve questions in the order in which they appear:**

It is usually seen that the answer to the first question is useful in solving the next question. So it is advisable that you solve the questions in the order in which they appear.

Also if you make mistakes while calculating the first question, you will most probably make mistakes in the subsequent questions. So be double sure of your answers.

**Solved Question Based on 2018 Exam**

Based on the table, answer the questions that follow (Questions 1-5):

The following table indicates the percentage of students enrolled in various faculties of a university. The total number of students in the university is 12000, out of which 52% are males and remaining are females.

<table>
<thead>
<tr>
<th>Name of faculty</th>
<th>Percentage (%) of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science</td>
<td>17%</td>
</tr>
<tr>
<td>Education</td>
<td>30%</td>
</tr>
<tr>
<td>Engineering</td>
<td>8%</td>
</tr>
<tr>
<td>Performing Arts</td>
<td>26%</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>19%</td>
</tr>
</tbody>
</table>
**Question 1**: Approximately, how many female students are there in the faculty of performing Arts if the proportion of males and females is the same for this faculty as for the whole university?

Options:-

1. (A) 2560
2. (B) 2678
3. (C) 1610
4. (D) 1498

ANS. D

The proportion of males for the whole university is 52%. Thus the proportion of males for faculty of performing arts will also be 52%. This means that proportion of female = \(100 - 52 = 48\%\)

Number of females in faculty of performing arts will be = \(12000 \times 26\% \times 48\% = 1497.6\)
or 1498 approx. Here since we need 26\% of 48\% of 12,000, we could have obtained answer by following way: 26\% of 48\% of 12,000, = 26\% of Half of 12,000 = 26\% of 6,000 = One-fourth of 6,000 = 1500 The answer closest to 1500 is 1498.

**Question 2**: Supposing, the number available in the faculty of Engineering doubles keeping the total number in the University to be the same by reducing the student numbers in faculty of performing Arts and faculty of Education equally, the number of students available in the faculty of Education will be:

Options:-

- (A) 2960
- (B) 3120
- (C) 2680
- (D) 3125

ANS. B

Related Posts
Sources acquisition and classification of Data

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The number of students in the faculty of Engineering = 8\% of 12000
But this number doubles, which comes equally from both Performing Arts & Education (4\% each).
Thus, the reduction in Education will be by 4\% of 12000.
After re-adjustment number of students in Education will be (30-4) = 26\% of 12000= 3120
Please note the point that, in this question, we never calculated the absolute number, till the last step. We just kept adding/subtracting in percentages only. This makes the
question easier and calculation faster.
Question 3 – The number of male students exceeding female students is:

Options:-

1. (A) 1680
2. (B) 1400
3. (C) 480
4. (D) 800

ANS. C

The number of Male students = 52% & Number of Female students = 48% Answer is (52 – 48)% of 12000 = 4% of 12000 = 480 Please note the point that, in this question, we never calculated the absolute number, till the last step. We just kept adding/subtracting in percentages only. This makes the question easier and calculation faster.

Question 4.) If half of the students from the faculty of Education and all of the students from the faculty of social sciences are females, then the number of female students in the three remaining faculties altogether will be:

Options:-

1. (A) 960
2. (B) 1240
3. (C) 1680
4. (D) 840

ANS. C

Question 5.) The difference in the number of students enrolled in the faculty of Science as compared to the number of students enrolled in the faculty of Engineering, is:

Options:- (A) 1180

(B) 2040

(C) 960

(D) 1080

ANS. D

*We have deliberately not given an explanation of 4,5 Question; Try solving them yourself*

Some Important Videos on Data Interpretation
Some Solved Examples

Directions (Questions: 01 – 06): Study the table and answer the given questions:
Data related to no.of employees who joined (Jo) and left (Le) 5 given companies during 5 given years.
(Consider the given companies started in 2001.)

5 tricks to crack Data Interpretation

1). If the ratio of the number of male to female employees in company B at the end of 2003 was 5 : 6, what was the number of female employees in company B at the end of 2003?

1. 208
2. 172
3. 186
4. 192
5. 212

[su_quote cite="UGC NET PAPER 1 Team"]Ans: 1. Total number of employees in company B at the end of 2003 = 148 + 172 -60 +188 – 96=352 Read no .of female employees = 6/11 ×352 =192 So the Answer is: 4[/su_quote]

2). What was the total number of employees in company A at the end of 2004?

1. 347
2. 363
3. 329
4. 335
5. 341

Ans: 2.Total no.of employees in company A at the end of 2004 = 161 + 148 – 58 +135 – 69 +112 – 88 = 556 – 215=341 So the Answer is: 5

3). The number of employees in company E at the end of 2002 is what percent more than the number of employees in company C at the end of 2002?
1. $9 \times \frac{1}{5}$
2. $3 \times \frac{4}{5}$
3. $11 \times \frac{1}{5}$
4. $7 \times \frac{3}{5}$
5. $5 \times \frac{4}{5}$

Ans: 3. Number of employees in company E at the end of 2002 = $128 + 191 - 50 = 269$

Number of employees in Company C at the end of 2002 = $179 + 161 - 90 = 250$. Read% = $269 - 250/250 \times 100 = 19/250 \times 100 = 38/5 = 7 \times \frac{3}{5}$% more So the Answer is: 4

4). In which of the given companies the number of employees was the highest at the end of 2002?

1. D
2. C
3. B
4. A
5. E

In 2002, the no. of employees in company A = $161 + 148 - 58 = 251$ Similar in company B = $148 + 172 - 60 = 260$ In company C = $179 + 161 - 90 = 250$ In company D = $116 + 208 - 60 = 324 - 60 = 264$ In company E = $128 + 191 - 50 = 269$ Hence the no. of employees in company E is the maximum at the end of 2002. So the answer is 5.

5). What is the average number of employees who joined company D during all the given years together?

1. 166
2. 156
3. 162
4. 164
5. 158

[su_quote cite="UGC NET PAPER 1 Team"]Total no. of employees who joined company D = $116 + 208 + 169 + 142 + 155 = 790$. Average = $790/5 = 158$ So the Answer is: 5[/su_quote]

6). What is the ratio of the total number of employees who joined company C in 2003 and 2004 together to the total number of employees who left company E in 2003, 2004 and 2005 together?

1. 11 : 9
2. 22 : 19
3. 13 : 9
Download Practise Set of 30 Question

DI section is the most typical and time consuming for most of the aspirants but if you believe in smart work you can subdue this problem.

Things you should adopt are as follows.

- **First and foremost learn tables up to 30. This will make your life easier.**
- **Learn Percentage table. For an example (66.66% = 2/3, 33.33%=1/3, 14.285%= 1/7 etc.).**
- **Discover your own methods, in which you are very comfortable when it comes to long addition, subtraction, multiplication. You can use the Internet to choose them.**
- **Learn the fraction table. Up to at least 20 (Example 1/16= 0.0625) and start playing with them :p**
- **Search for methods like approximation, ratio etc to reduce the complexity of calculation.**
- **Do mental math exercises when you find yourself free. It’ll really help you.**
- **Apart from your daily math routine. Give some extra time to improve your calculation part because DI is all about calculation.**
- **Lastly, I’d suggest panacea for all diseases is practice. Practice as much as possible.**

Some Reference Materials you follow for more details:

- [Data-Interpretation.pdf](Data-Interpretation.pdf) [Source shriramedu.com]
- Solved Papers from various sources like [UGC NET /humanperitus website/ edu-uncle etc.]
- [http://www.campusgate.co.in/2014/03/data-interpretation-pie-charts.html](http://www.campusgate.co.in/2014/03/data-interpretation-pie-charts.html)