

## Pie Graph Based DI for Bank PO Prelims Exams



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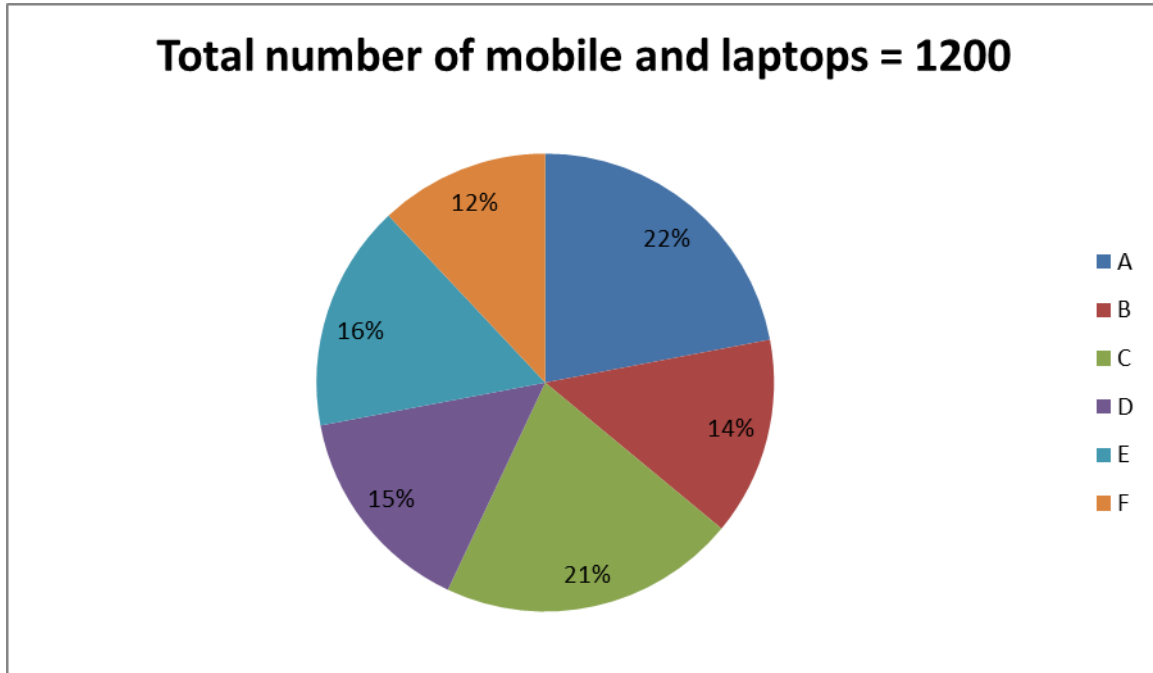
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## Pie Graph Based DI for Bank PO Prelims Exams

Directions (1-5): Study the following information carefully and answer the questions given below.

The given pie chart shows the number of mobile and laptops manufactured in 6 different companies.



1) The ratio of the number of mobile and laptop manufactured in A and E is 6:5 and 5:3 respectively. The total number of laptop manufactured in A and E together is approximately what percent of the total number of mobile manufactured in A and E together?

- a) 73%
- b) 78%
- c) 80%
- d) 68%
- e) 82%

2) What is the difference between the number laptop and mobile manufactured in B, if the number of laptop manufactured in B is 40% of the total number of products manufactured in D?

- a) 28

- b) 26
- c) 24
- d) 22
- e) None of these

3) What is the sum of the total number of laptop manufactured in A and B together?

**Statement I:** The ratio of total number of Laptop manufactured in A to the total number of mobile manufactured in B is 4:2.

**Statement II:** Total number of mobile manufactured in A is 20% of the total number of manufactured in D.

**Statement III:** The number of laptop manufactured in B is 20% of the total number mobile manufactured in D.

- a) Only I and II
- b) Only II and III



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- c) Either I or II and III are sufficient  
d) All I, II and III necessary to the answer the question  
e) The question can't be answered even with all I, II and III

4) If the number of mobile manufactured in F is 25%, what is the difference between the number of laptop manufactured in F and the total number of products manufactured in C?

- a) 134  
b) 124  
c) 154  
d) 144  
e) None of these  
5)

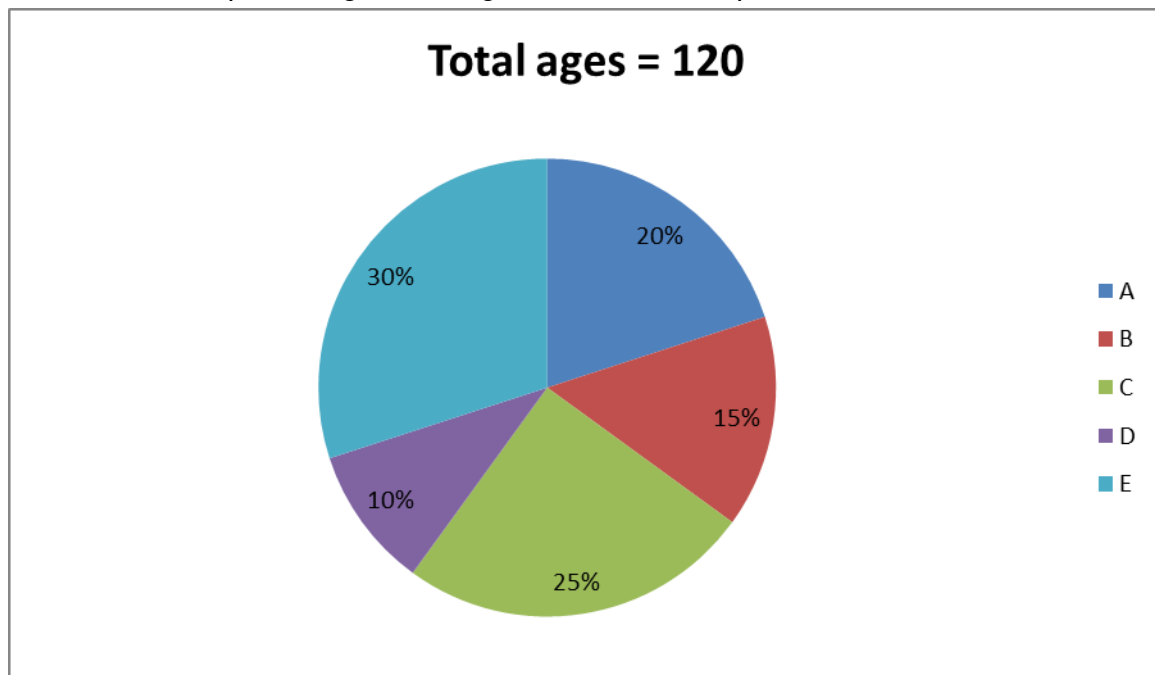
**Quantity I:** If the ratio of the laptop and mobile manufactured in C is 4:3 and the number of laptop manufactured in E is 25% more than that of number of mobile manufactured in C. What is the sum of the number of laptop manufactured in C and the number of mobile manufactured in E?

**Quantity II:** What is the average number of products manufactured in F, A, D and B together?

- a) Quantity I > Quantity II  
b) Quantity I  $\geq$  Quantity II  
c) Quantity II > Quantity I  
d) Quantity II  $\geq$  Quantity I  
e) Quantity I = Quantity II or Relation cannot be established

**Directions (6-10):** Study the following information carefully and answer the questions given below.

The given pie chart shows the percentage of the ages of five different persons.



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6) The difference between the ages of C and D is equal to the F's age 7 years ago. If the ratio of the ages of F to G after 5 years is 5:8 and H's present age is half of G's age one year ago. What is the difference between the average ages of H, D and E together and the average ages of A and G together?

- a) 10.5 years
- b) 12.5 years
- c) 15.5 years
- d) 17.5 years
- e) None of these

7) The difference between the ages of D and A is equal to present age of F. Ratio of the ages of F and G after 8 years is 2:3. Find G's age 9 years ago?

- a) 12 years
- b) 13 years
- c) 15 years
- d) 18 years
- e) None of these

8) If the average ages of B, F and G is 18 years and the E's age is 50% more than G, then the average ages of F and H after 6 years is 25 years, then what is H's age 10 years ago?

- a) 20 years
- b) 12 years
- c) 16 years
- d) 24 years
- e) None of these

9) Average ages of A, C and E is equal to the sum of the ages of R and S. If the product of the ages of R and D is 156 years, then what is the present age of S?

- a) 12 years
- b) 15 years
- c) 17 years
- d) 19 years
- e) 21 years

10) The present age of F is 50% more than the present age of G. If the average age of G, D and H is 24 years and ratio of the ages of H to C is 7:5, then what is the average age of F, G and H?

- a) 27 years
- b) 29 years
- c) 31 years
- d) 33 years
- e) None of these

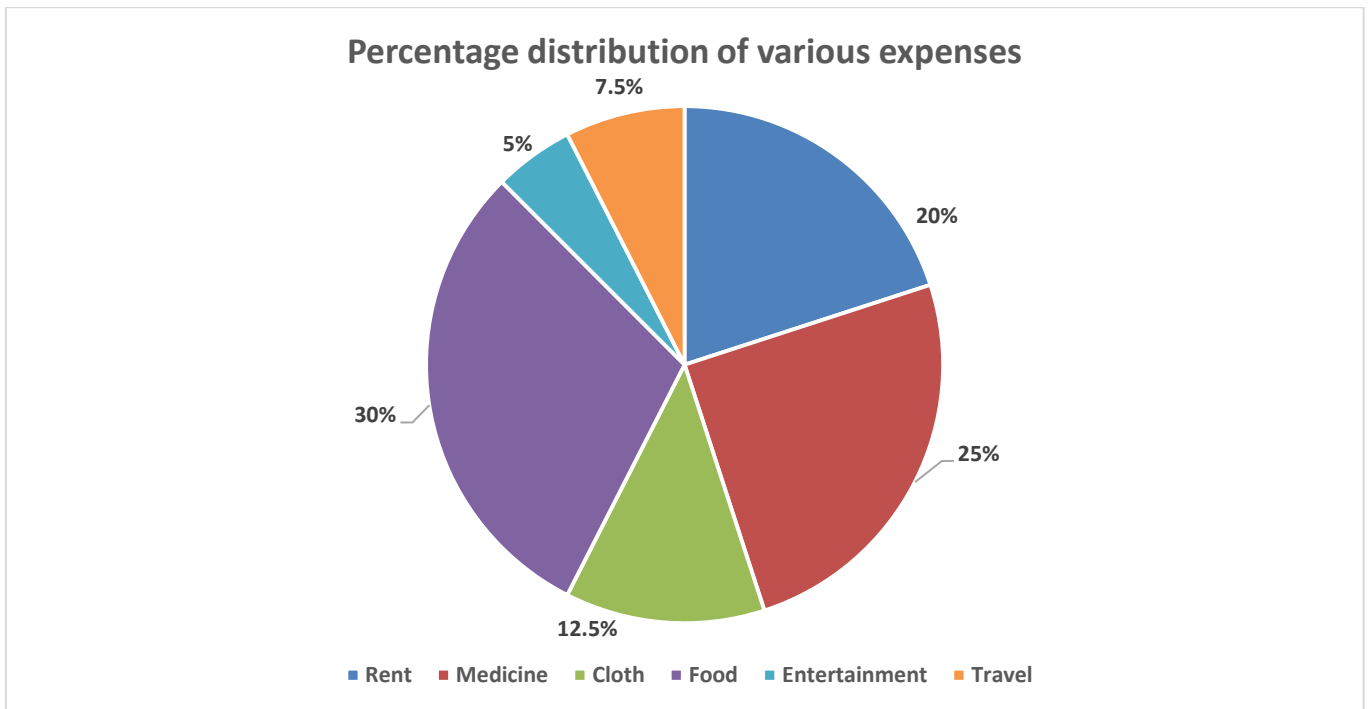
Directions (11-15): Read the following instructions carefully and answer the following questions

The following pie-chart shows the salary distribution of Mr.X on various expenses.

Total salary of Mr.X = Rs.60000



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11) What is the ratio between money spent on food and travel together to money spent on rent and medicine together?

- a) 5:7
- b) 5:3
- c) 5:4
- d) 5:6
- e) 7:5

12) What is total money spent on cloth and food together?

- a) Rs.25050
- b) Rs.25500
- c) Rs.25000
- d) Rs.24500
- e) Rs.25400

13) Money spent on travel is what percentage more or less than the money spent on entertainment?

- a) 50% more
- b) 44.44% less
- c) 25% more
- d) 33.33% less
- e) 30% more

14) What is the difference between money spent on travel & entertainment together and food & medicine together?

- a) Rs.25050
- b) Rs.25400
- c) Rs.25500
- d) Rs.24050
- e) Rs.24500



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15) If the salary of Mr.X is increased by 25% also he increases expenditure on cloth by Rs.500, then find the percentage of amount he spend to buy cloth?

a) 16.67%

b) 12.5%

c) 10%

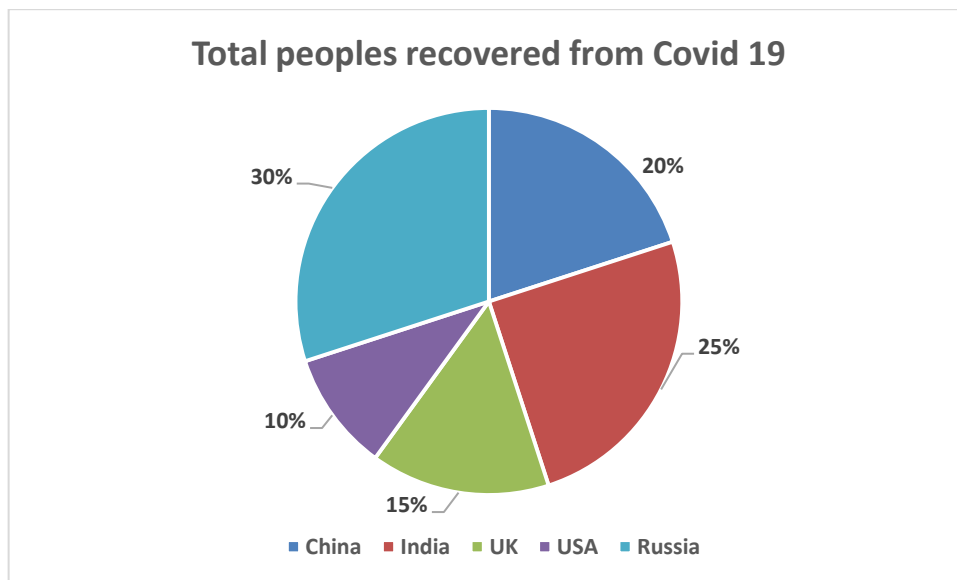
d) 11.66%

e) 10.67%

Directions (16-20): Read the following instructions carefully and answer the following questions.

The following pie-chart shows the total peoples recovered from covid 19 in various countries.

Total peoples recovered from covid 19 = 12400



The following table shows the ratio of male to female recovered from covid 19 in various countries	Country	Ratio of female to male recovered from covid 19
China		27:35
India		10:21
UK		15:16
USA		2:3
Russia		43:50



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16) Find the average number of males recovered from covid 19?

- a) 1420.8
- b) 1340.8
- c) 1440.4
- d) 1440.8
- e) 1404.8

17) No. of recovered female from USA is what percent (approx.) more or less than no. of recovered males from china?

- a) 65%less
- b) 60%more
- c) 70%less
- d) 55%more
- e) 75%less

18) Find the ratio of sum of the female from India, UK and Russia together recovered from covid 19 to the male recovered from same countries together?

- a) 181:263

- b) 181:253

- c) 253:181

- d) 253:161

- e) None of the above

19) If only 40% of total people who are affected by covid 19 from India are recovered, then find the number of peoples not recovered from covid 19 in India?

- a) 1550

- b) 1450

- c) 1860

- d) 2750

- e) None of these

20) Find the overall difference between male and females recovered from covid 19?

- a) 2004

- b) 2006

- c) 2002

- d) 2010

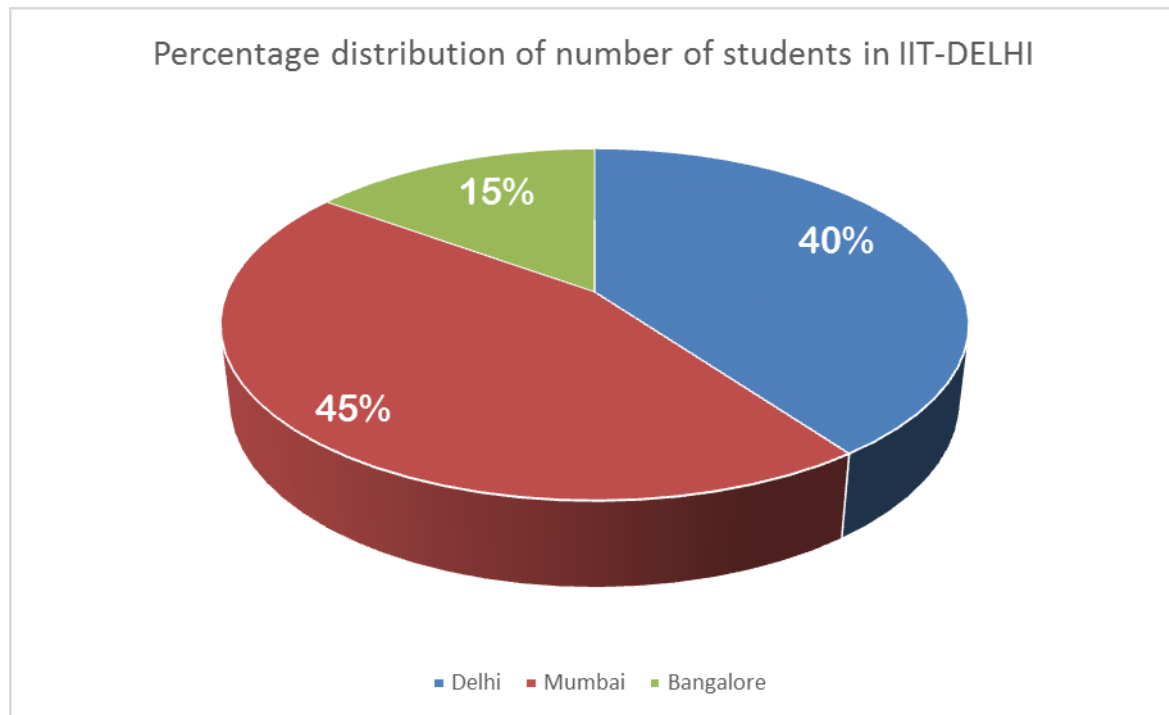
- e) 2008

**Directions (21 – 25):** Read the following information given below and answer the following questions

The pie chart given below shows the percentage distribution of number of students in class of 2018 – 2020 PGDM batch in IIT-DELHI coming from different cities: Delhi, Mumbai and Bangalore. Total number of students in a batch is 1600.



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The table given below shows the ratio of engineering background and non-engineering background students in IIT-DELHI coming from three different cities.

City	Engineers: Non Engineers
Delhi	5:3
Mumbai	2:7
Bangalore	4:1

21) Find the ratio of engineers from Delhi and non – engineers from Mumbai respectively?

- a) 4:7
- b) 7:5
- c) 5:7
- d) 3:7
- e) None of these

22) Find the difference between total engineers and non-engineers students in class of 2018 – 2020 PGDM batch from IIT-DELHI?

- a) 76
- b) 96
- c) 86
- d) 56
- e) None of these



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23) Find the average of engineers from Bangalore and Mumbai together is how much % of non-engineers of Delhi?

- a) 73.33%
- b) 74.33%
- c) 75.33%
- d) 76.33%
- e) 79.33%

24) Difference between the engineer's students from Mumbai and Non-engineer's students from Bangalore is how much % more or less than the non-engineers students from Mumbai?

- a) 20% more

b) 75% less

c) 60% more

d) 80% less

e) None of these

25) Find the value of central angle corresponding to the numbers of students in Delhi and Bangalore together? (in degrees)

a)  $155^\circ$

b)  $160^\circ$

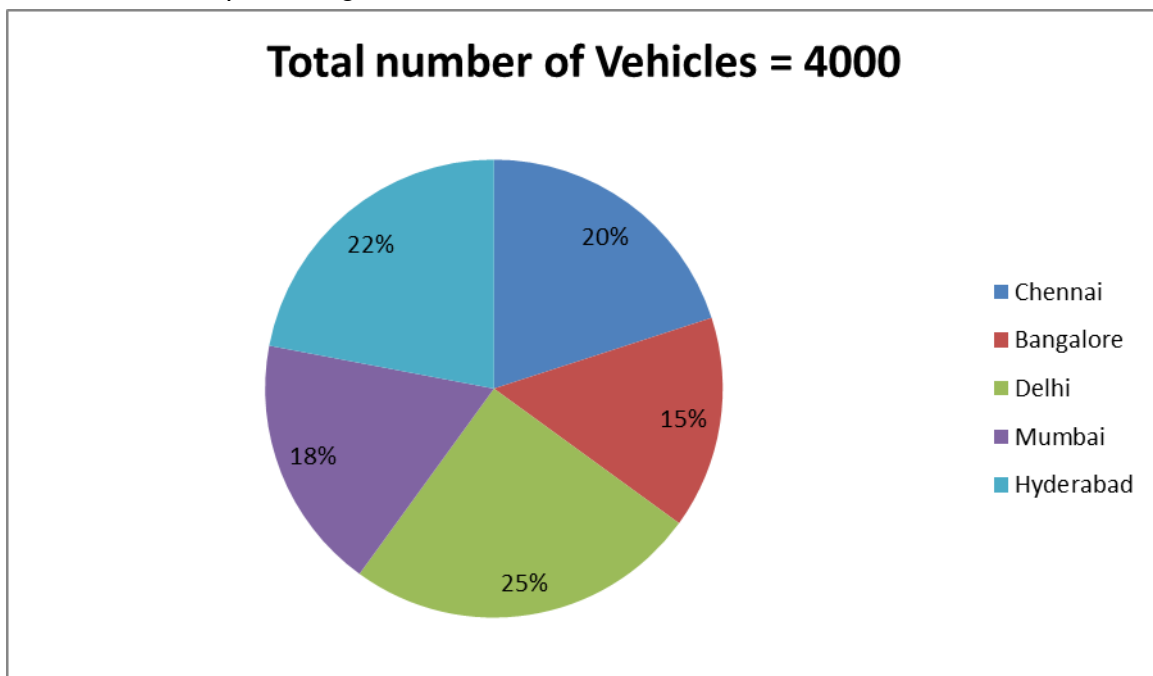
c)  $125^\circ$

d)  $198^\circ$

e) None of these

Directions (26 -30): Study the following information carefully and answer the questions given below.

The given pie chart shows the percentage of the vehicles in five different cities in 2018.



The given table shows the ratio of the number of Petrol to Diesel vehicles in different cities.



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Cities	Petrol:Diesel
Chennai	5:3
Bangalore	2:1
Delhi	3:2
Mumbai	5:3
Hyderabad	6:5

26) The number of petrol vehicle in Mumbai is approximately what percent of the number of petrol vehicle in Delhi?

- a) 65%
- b) 70%
- c) 75%
- d) 80%
- e) None of these

27) In 2019 the total number of vehicles in Bangalore and Mumbai is increased by 20% and 25% respectively compared to previous years and the ratio of the number of petrol to Diesel vehicle in Bangalore and Mumbai in 2019 is 5:3 and 2:3 respectively.

**Quantity I:** Sum of the number of petrol vehicle in Bangalore and Mumbai together in 2019.

**Quantity II:** Sum of the number of Diesel vehicle in Bangalore and Mumbai together in 2019.

- a) Quantity I > Quantity II
- b) Quantity I  $\geq$  Quantity II
- c) Quantity I = Quantity II
- d) Quantity I < Quantity II
- e) Quantity I  $\leq$  Quantity II

28) What is the difference between the average number of petrol and Diesel vehicle in all the cities together?

- a) 168
- b) 170
- c) 172
- d) 164
- e) 162

29) Which of the following cities the number of Diesel vehicles are equal?

- a) Chennai and Hyderabad
- b) Delhi and Mumbai
- c) Bangalore and Chennai
- d) Hyderabad and Delhi
- e) Mumbai and Bangalore

30) In 2019, the total number of vehicles in Chennai is increased by 25% compared previous year. If the number of petrol vehicle in Chennai in 2019 is equal to the number of petrol vehicle in Hyderabad in 2018, then find the number of Diesel vehicle in Chennai in 2019?

- a) 500
- b) 520
- c) 540
- d) 560



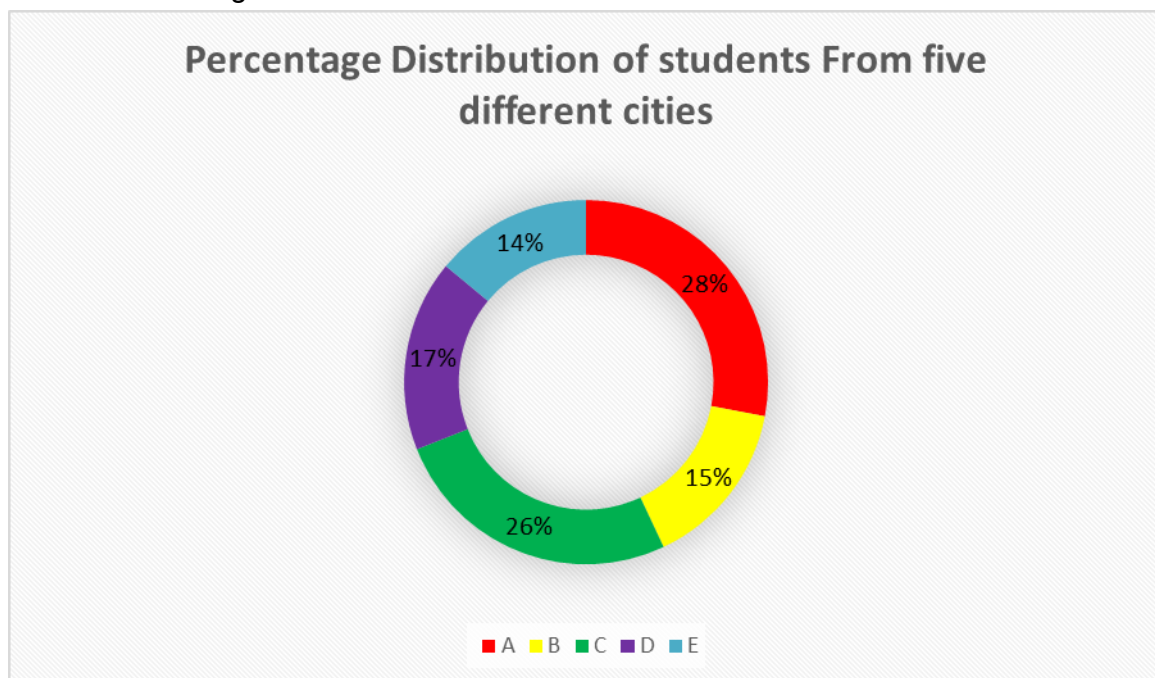
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e) None of these

**Directions (31 – 35):** Read the following information carefully and answer the following questions based on it.

The following Pie Chart shows the % distribution of students those who are writing Xavier's Aptitude Test (XAT) 2020 from five different cities out of total students those are writing XAT – 2020.

Total number of students writing XAT exam in 2020 = 13500



The table given below shows the ratio of boys and girls writing XAT exam in the given cities.

City	Boys: Girls
A	3:4
B	4:5
C	7:6
D	9:8
E	5:4



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31) Find the difference between the total number of boys writing XAT exam in all cities together to total number of girls writing XAT exam in all cities together?

- a) 150
- b) 75
- c) 160
- d) 80
- e) None of these

32) The number of boys writing XAT exam in city F is 16.66% more than number of girls writing XAT exam in city A and the ratio of number of girls writing XAT exam in city F to boys writing XAT exam in city C is 4:15. Then find the total number of students writing XAT exam in city F?

- a) 3034
- b) 2024
- c) 3024
- d) 2034
- e) None of these

33) Find the average number of total students writing XAT exam from City B and City D together is approximately how much percentage of average number of total students writing XAT exam in city A and E together?

- a) 75.2%
- b) 76.2%
- c) 77.2%
- d) 78.2%
- e) 79.2%

34) Total number of boys writing XAT exam in City B and E together is approximately how much percentage more/ less than number of girls writing XAT exam in city C and D together?

- a) 29.8% more
- b) 25.8% less
- c) 26.8% more
- d) 27.8% less
- e) 30.8% less

35) Find the ratio of number of boys writing XAT exam in city A to the total number of students writing XAT exam in city A and city B together?

- a) 12:47
- b) 17:43
- c) 13:43
- d) 11:43
- e) None of these

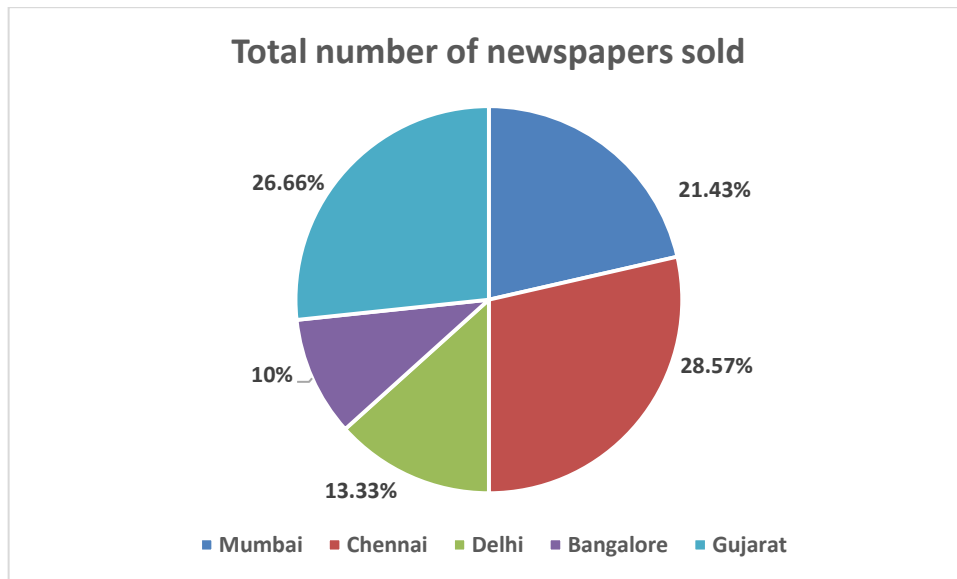
Directions (36-40): Study the following information carefully and answer the questions given below.

The following pie-chart shows the percentage distribution of total newspapers sold in different cities

Total newspaper sold = 52500



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Total newspaper sold in a city = sum of the no. of TheHindu & Indian express newspaper sold in the city

The following table shows the number of Indian express newspaper sold in various cities

City	Number of Indian express newspaper sold
Mumbai	5250
Chennai	8000
Delhi	4300
Bangalore	2825
Gujarat	4500

36) Total number of Hindu newspaper sold in which city is second lowest?

- a) Bangalore
- b) Mumbai
- c) Delhi
- d) Chennai
- e) Gujarat

37) Find the ratio of number of Hindu newspaper sold in Chennai and Indian express sold in Bangalore together

to the number of Indian express sold in Mumbai and Hindu sold in Gujarat together?

- a) 393:590
- b) 393:591
- c) 393:592
- d) 590:393
- e) 591:393



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38) Number of Indian express newspaper sold in Gujarat is what percentage of number of The Hindu newspaper sold in Mumbai?

- a) 70%
- b) 66.66%
- c) 50%
- d) 83.33%
- e) None of these

39) What is the difference between the average number of Indian Express newspaper sold in all the cities together and the average number of The Hindu newspaper sold in all the cities together?

- a) 520
- b) 550

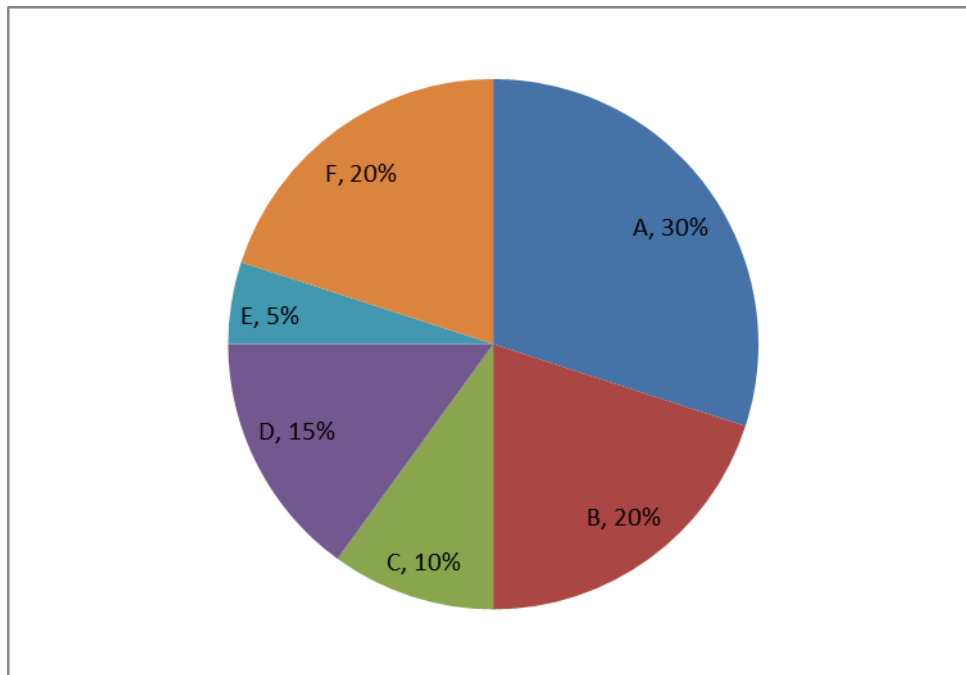
- c) 440
- d) 490
- e) 500

40) If there are 25%, 20%, 30% of the Hindu newspapers sold in Delhi, Bangalore and Gujarat respectively are returned due to damage issue, then what is the number of damaged newspaper returned in these cities together?

- a) 4010
- b) 4030
- c) 4040
- d) 4020
- e) 4100

Directions (41-45): Study the following information carefully and answer the questions given below.

Percentage of employees in different departments of an organization



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The table shows the ratio of male to female in different age group

	Below 35 years	Above 35 years
	Male: Female	Male : Female
A	9:11	4:5
B	9:1	3:7
C	7:8	8:7
D	7:8	7:9
E	4:1	5:7
F	7:3	1:9

41) If the total number of employees in department A is 255 and the total number of male employees below 35 years and females employees above 35 years is 131 in department B, then find the ratio of the total number of employees in department B above 35 years to the total number of employees in department B below 35 years?

- a) 11:6
- b) 10:7
- c) 12:5
- d) 12:7
- e) None of these

42) If the total number of employees in department D is 375 and the total number of male employees above 35 years of age and female employees below 35 years is 122 in department F, then what is the number of male employees below 35 years in department F?

- a) 255
- b) 265
- c) 252

d) 262

e) None of these

43) If the total number of employees in department B below 35 years and above 35 years is 1320 and the number of male employees below 35 years in the same department is 360 then find the number of female employees above 35 years in department B?

- a) 644
- b) 645
- c) 636
- d) 684
- e) None of these

44) If the number of female employees below 35 years and the number of male employees above 35 years in department E are 40 and 75 respectively, then find the number of employees in company A?

- a) 2180
- b) 2380
- c) 2250



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d) 2280

e) None of these

45) The total number of employees in department C is 160. Then what is the number of female employees above 35 years in department D if total employees below 35 years in department D are 96?

a) 85

b) 91

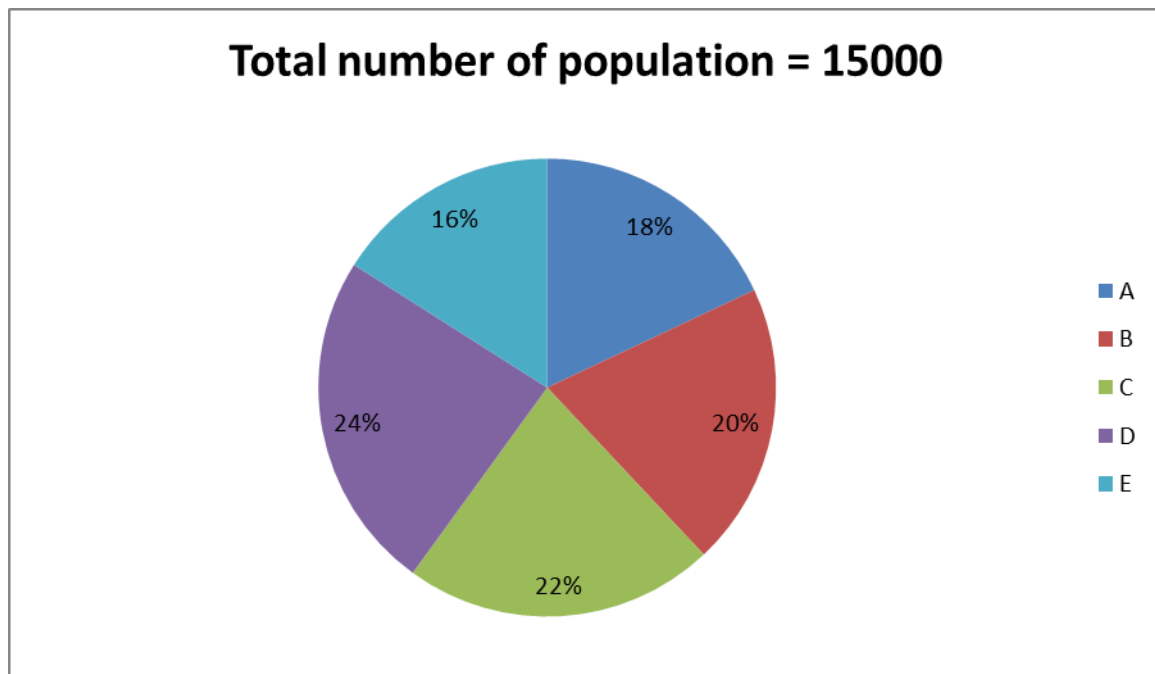
c) 82

d) 71

e) None of these

Directions (46-50): Study the following information carefully and answer the questions given below.

The given pie chart shows the number of population in five different cities.



The given table shows the percentage of male population in five different cities.

Cities	%Male population
A	45%
B	55%
C	65%
D	70%
E	60%



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46) What is the difference between the number of female population in A and D?

- a) 400
- b) 405
- c) 410
- d) 415
- e) 420

47) Ratio of the number of literate to illiterate population in B is 3:2 and the ratio of the number of male literate to male illiterate population in B is 3:2. What is the difference between the number of female illiterate and female literate population in B?

- a) 240
- b) 270
- c) 300
- d) 210
- e) 180

48) What is the average number of male population in all the cities together?

- a) 1798

b) 1776

c) 1794

d) 1788

e) 1782

49) The number of female population in C and E together is approximately what percent of the total number of population in B?

- a) 70.5%
- b) 72.5%
- c) 74.5%
- d) 76.5%
- e) 68.5%

50) What is the ratio of the number of female population in B to number of male population A?

- a) 5:4
- b) 8:7
- c) 7:6
- d) 3:2
- e) None of these

### Answer Key Detailed Solution:

**Answers:**

1) Answer: A

Number of mobile manufactured in A =  $\frac{22}{100} \times 1200 \times \frac{6}{11} = 144$

Number of laptop manufactured in A =  $\frac{22}{100} \times 1200 \times \frac{5}{11} = 120$

Number of mobile manufactured in E =  $\frac{16}{100} \times 1200 \times \frac{5}{8} = 120$

Number of laptop manufactured in E =  $\frac{16}{100} \times 1200 \times \frac{3}{8} = 72$

Required percentage =  $\frac{(72+120)}{(144+120)} \times 100 = 72.72\% \sim 73\%$

2) Answer: C



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Number of laptop manufactured in B =  $15/100 \times 1200 \times 40/100 = 72$

Total number of products manufactured in B =  $14/100 \times 1200 = 168$

Number of Mobile manufactured in B =  $168 - 72 = 96$

Required Difference =  $96 - 72 = 24$

### 3) Answer: A

From statement I,

The ratio of total number of Laptop manufactured in A to the total number of mobile manufactured in B is 4:2.

So, Statement I alone is not sufficient to the answer the question.

From Statement II,

Number of products manufactured in D =  $15/100 \times 1200 = 180$

Mobile manufactured in A =  $20/100 \times 180 = 36$

Total number of manufactured products in A =  $22/100 \times 1200 = 264$

Number of Laptop manufactured in A =  $264 - 36 = 228$

So, Statement II alone is not sufficient to the answer the question.

From Statement III,

The number of laptop manufactured in B is 20% of the total number mobile manufactured in D.

So, Statement III alone is not sufficient to the answer the question.

From Statement I and II,

Number of mobile manufactured in B =  $2/4 \times 228 = 114$

Total number of manufactured products in B =  $14/100 \times 1200 = 168$

Number of Laptop manufactured in B =  $168 - 114 = 54$

Required total =  $54 + 228 = 282$

### 4) Answer: D

Number of laptop manufactured in

F =  $12/100 \times 1200 \times 75/100 = 108$

Total number of manufactured in C =  $21/100 \times 1200 = 252$

Required Difference =  $252 - 108 = 144$

### 5) Answer: A

From quantity I,

Number of laptop manufactured in C =  $21/100 \times 1200 \times 4/7 = 144$

Number of mobile manufactured in C =  $21/100 \times 1200 \times 3/7 = 108$

Number of laptop manufactured in E =  $125/100 \times 108 = 135$

Total number of manufactured in E =  $16/100 \times 1200 = 192$

Number of mobile manufactured in E =  $192 - 135 = 57$

Required sum =  $144 + 57 = 201$

From quantity II,

Total number of products manufactured in A, B, D and F =  $63/100 \times 1200 = 756$

Average =  $756/4 = 189$

Quantity I > quantity II

### 6) Answer: A

A =  $20/100 \times 120 = 24$  years

B =  $15/100 \times 120 = 18$  years

C =  $25/100 \times 120 = 30$  years

D =  $10/100 \times 120 = 12$  years

E =  $30/100 \times 120 = 36$  years



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F's age 7 years ago =  $30 - 12 = 18$  years

F's present age =  $18 + 7 = 25$  years

G age after 5 years =  $30 * 8/5 = 48$  years

G present age =  $48 - 5 = 43$  years

H =  $(43 - 1)/2 = 21$  years

Average ages of H, D and E =  $(21 + 12 + 36)/3 = 23$  years

Average ages of A and G =  $(43 + 24)/2 = 33.5$  years

Difference =  $33.5 - 23 = 10.5$  years

**7) Answer: B**

F =  $24 - 12 = 12$  years

After 8 years F's age =  $12 + 8 = 20$  years

After 8 years G's age =  $3/2 * 20 = 30$  years

G age 9 years ago =  $30 - 8 - 9 = 13$  years

**8) Answer: C**

Average ages of F + G + B =  $18 * 3 = 54$  years

Ratio of G and E =  $100:150 = 2:3$

G =  $2/3 * 36 = 24$  years

F =  $54 - 18 - 24 = 12$  years

Average ages of H and F =  $25 * 2 - 12 = 38$

H's present age =  $38 - 12 = 26$  years

H age 10 years ago =  $26 - 10 = 16$  years

**9) Answer: C**

Sum of the ages of S and R =  $(30 + 24 + 36)/3 = 30$  years

R \* D = 156

R \* 12 = 156

R = 13 years

S =  $30 - 13 = 17$  years

**10) Answer: B**

D + G + H =  $24 * 3 = 72$

H =  $7/5 * 30 = 42$  years

G =  $72 - 12 - 42 = 18$  years

F =  $3/2 * 18 = 27$  years

Required Average =  $(27 + 18 + 42)/3 = 29$  years

**11) Answer: D**

Required ratio =  $(30+7.5)\%$  of 60000 :  $(20+25)\%$  of 60000

= 37.5: 45

= 5:6

**12) Answer: B**

Total money spent on cloth =  $12.5\%$  of 60000 = Rs.7500

Total money spent on food =  $30\%$  of 60000 = Rs.18000

Required sum =  $7500+18000$  = Rs.25500

**13) Answer: A**

Required percentage =  $\frac{7.5-5}{5} \times 100 = 50\%$  more

**14) Answer: C**

Required difference =  $(30+25)\%$  of 60000 –  $(7.5+5)\%$  of 60000

=  $55\%$  of 60000 –  $12.5\%$  of 60000

=  $42.5\%$  of 60000

= Rs.25500

**15) Answer: E**

New salary of the person =  $125\%$  of 60000 = Rs.75000

Expenditure on cloths =  $12.5\%$  of 60000 = Rs.7500

New expenditure on cloths =  $7500+500$  = Rs.8000

Percentage of expenditure on cloth =  $\frac{8000}{75000} \times 100 =$

10.67%



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### Directions (16-20):

From pie-chart,

Peoples recovered from covid 19 in china = 20% of 12400 = 2480

Number of males recovered from covid 19 in china =  $\frac{2480}{62} \times 35 = 1400$

Therefore, number of female recovered from covid 19 in china

=  $\frac{2480}{62} \times 27 = 1080$

Similarly, values for all the countries are found and the results are tabulated.

Country	No. of males recovered	No. of females recovered	Total
China	1400	1080	2480
India	2100	1000	3100
UK	960	900	1860
USA	744	496	1240
Russia	2000	1720	3720

16) Answer: D

Required average =  $\frac{1400+2100+960+744+2000}{5} = 1440.8$

17) Answer: A

Required percentage =  $\frac{1400-496}{1400} \times 100 = 65\%$  less

18) Answer: B

Sum of the females recovered from India , UK, Russia

= 1000+900+1720

= 3620

Sum of the males recovered from India , UK, Russia

= 2100+960+2000

= 5060

Required ratio = 3620: 5060 i.e 181:253

19) Answer: E

Total peoples recovered from covid 19 in India = 3100

Peoples who have not recovered from covid 19 =  $\frac{3100}{40} \times 60 = 4650$



## Pie Graph Based DI for Bank PO Prelims Exams

20) Answer: E

Total number of males recovered from covid 19

$$= 1400 + 2100 + 960 + 744 + 2000$$

$$= 7204$$

Total number of females who recovered from covid 19

$$= 12400 - 7204$$

$$= 5196$$

$$\text{Required difference} = 7204 - 5196 = 2008$$

Directions (21 – 25):

City	Students	Engineers	Non – engineers
Delhi – 40%	40% of 1600 = 640	$(5/8) \times 640 = 400$	240
Mumbai – 45%	45% of 1600 = 720	$(2/9) \times 720 = 160$	560
Bangalore – 15%	15% of 1600 = 240	$(4/5) \times 240 = 192$	48

21) Answer: C

$$\text{Required ratio} = 400 : 560 = 5 : 7$$

22) Answer: B

$$\text{Total number of engineers} = 400 + 160 + 192 = 752$$

$$\text{Total number of non-engineers} = 240 + 560 + 48 = 848$$

$$\text{Required difference} = 848 - 752 = 96$$

23) Answer: A

$$\text{Average number of engineers from Bangalore and Mumbai together} = (160 + 192)/2 = 176$$

$$\text{Number of non-engineers in Delhi} = 240$$

$$\text{Required \%} = (176/240) \times 100 = 73.333 \%$$

24) Answer: D

$$\text{Difference} = 160 - 48 = 112$$

$$\text{Non-engineers from Mumbai} = 560$$

$$\text{Required \% change} = ((560 - 112)/560) \times 100 = 80\% \text{ less}$$

25) Answer: D

$$\text{Combined \% distribution of Delhi and Bangalore together} = 40 + 15 = 55\%$$



## Pie Graph Based DI for Bank PO Prelims Exams

Required angle = 55% of 360 = 198°

Directions (26-30):

Cities	Total vehicles	Petrol	Diesel
Chennai	800	500	300
Bangalore	600	400	200
Delhi	1000	600	400
Mumbai	720	450	270
Hyderabad	880	480	400

26) Answer: C

Required percentage =  $450/600 \times 100 = 75\%$

27) Answer: C

Total number of vehicles in Bangalore in 2019 =  $600 \times 120/100 = 720$

Number of petrol vehicle in Bangalore =  $720 \times 5/8 = 450$

Number of Diesel vehicle in Bangalore =  $3/8 \times 720 = 270$

Total number of vehicles in Mumbai in 2019 =  $720 \times 125/100 = 900$

Number of petrol vehicle in Mumbai =  $900 \times 2/5 = 360$

Number of Diesel vehicle in Mumbai =  $900 \times 3/5 = 540$

From quantity I,

Required sum =  $450 + 360 = 810$

From quantity II,

Required sum =  $270 + 540 = 810$

Quantity I = quantity II

28) Answer: C

Average number of petrol vehicle =  $(500 + 400 + 600 + 450 + 480)/5 = 486$

Average number of Diesel vehicle =  $(300 + 200 + 400 + 270 + 400)/5 = 314$

Required Difference =  $486 - 314 = 172$

29) Answer: D

30) Answer: B

In 2019 total number of vehicles in Chennai =  $800 \times 125/100 = 1000$

Number of petrol vehicle in Chennai in 2019 = 480



## Pie Graph Based DI for Bank PO Prelims Exams

Number of Diesel vehicle in Chennai in 2019 =  $1000 - 480 = 520$

**Directions (31 – 35):**

Total students writing XAT exam in A =  $28\%$  of  $13500 = 3780$

Boys in city A =  $\frac{3}{7} \times 3780 = 1620$

Girls in City A =  $\frac{4}{7} \times 3780 = 2160$

Similarly, we find in all the cities

City	Total students writing XAT exam	Boys	Girls
A	3780	1620	2160
B	2025	900	1125
C	3510	1890	1620
D	2295	1215	1080
E	1890	1050	840

**31) Answer: A**

Total number of boys writing XAT exam in all cities together =  $1620 + 900 + 1890 + 1215 + 1050 = 6675$

Total number of girls writing XAT exam in all cities together =  $2160 + 1125 + 1620 + 1080 + 840 = 6825$

Required difference =  $150$

**32) Answer: C**

Number of boys writing XAT exam in city F =  $\frac{7}{6} \times 2160 = 2520$

Number of girls writing XAT exam in city F =  $\frac{4}{15} \times 1890 = 504$

Total students from city F writing XAT exam =  $2520 + 504 = 3024$

**33) Answer: B**

Average students writing XAT exam in City B and City D together =  $(2025 + 2295)/2 = 2160$

Average students writing XAT exam in City A and City E together =  $(3780 + 1890)/2 = 2835$

Required percentage =  $[2160/2835] \times 100 = 76.2\%$

**34) Answer: D**

Number of boys in B and E together =  $900 + 1050 = 1950$

Number of girls in C and D together =  $1620 + 1080 = 2700$

Required % change =  $[(2700 - 1950) / 2700] \times 100 = 27.8\%$  less

**35) Answer: E**



## Pie Graph Based DI for Bank PO Prelims Exams

Number of boys in city A =  $28\% \times \frac{3}{7} = 12\%$

Total students in city A and city B together =  $28\% + 15\% = 43\%$

Hence required ratio =  $12\%:43\% = 12:43$

**Directions (36-40):**

From the given pie-chart,

Total newspaper sold in Mumbai =  $21.43\%$  of 52500 =  $\frac{3}{14}$  (52500) = 11250

Total newspaper sold in Chennai =  $28.57\%$  of 52500 =  $\frac{2}{7}$  (52500) = 15000

Total newspaper sold in Delhi =  $13.33\%$  of 52500

=  $(33.33\% - 20\%)$  of 52500

=  $(\frac{1}{3} - \frac{1}{5})$  of 52500

=  $\frac{2}{15}$  (52500)

= 7000

Total newspaper sold in Bangalore =  $10\%$  of 52500 = 5250

Therefore,

Total newspaper sold in Gujarat =  $52500 - (11250 + 15000 + 7000 + 5250)$

= 14000

City	Number of Indian express newspaper sold	Number of The Hindu newspaper sold	Total newspapers sold
Mumbai	5250	6000	11250
Chennai	8000	7000	15000
Delhi	4300	2700	7000
Bangalore	2825	2425	5250
Gujarat	4500	9500	14000

36) Answer: C



## Pie Graph Based DI for Bank PO Prelims Exams

Number of the Hindu newspaper sold in Delhi is second lowest i.e. 2700

**37) Answer: A**

Required ratio (7000+2825): (5250+9500)

9825:14750

393:590

**38) Answer: E**

Required percentage =  $\frac{4500}{6000} \times 100 = 75\%$

**39) Answer: B**

Total number of Indian express newspaper sold in all the cities together

= 5250+8000+4300+2825+4500

= 24875

Average of no. of Indian express sold in all the cities together

=  $\frac{24875}{5}$

= 4975

Total number of The Hindu newspaper sold in all the cities together

= 52500 – 24875

= 27625

Average of The Hindu newspapers sold in all the cities together

=  $\frac{27625}{5}$

= 5525

Required difference = 5525 – 4975 = 550

**40) Answer: A**

Number of damaged newspaper = 25% of (2700) + (20% of 2425) + (30% of 9500)

= 675 + 485 + 2850

= 4010

**41) Answer: A**

Total number of employees in the organization =

$255 \times \frac{100}{30} = 850$

So, total number of employees in B =  $850 \times \frac{20}{100} = 170$

Let the total number of employees in B below 35 years and above 35 years be X and Y respectively.

Then,

$\frac{9}{10}X + \frac{7}{10}Y = 131$

$9X + 7Y = 1310$  -----(i)

Also  $X+Y = 170$  -----(ii)

Solving (i) & (ii), we get

$X = 60$  and  $Y = 110$

Required ratio = 110:60

= 11:6

**42) Answer: C**

Total number of employees in the organization =

$\frac{375}{15} \times 100 = 2500$

Now, total number of employees in F =  $2500 \times \frac{20}{100} = 500$

Let the number of employees below 35 years and above 35 years be X and Y in department F respectively.

So,  $X + Y = 500$  -----(i)

$\frac{1}{10}Y + \frac{3}{10}X = 122$

$3X + Y = 1220$  -----(ii)

Solving (i) and (ii), we get

$X = 360$  and  $Y = 140$



## Pie Graph Based DI for Bank PO Prelims Exams

Thus, the number of males below 35 years in F =  
 $\frac{7}{10} \times 360 = 252$

**43) Answer: A**

Let the employees below 35 year be  $B_{35}$  and those above 35 be  $A_{35}$

$$B_{35} + A_{35} = 1320$$

$$B_{35} \text{ male employees} = 360$$

$$9 = 360$$

$$10 = \frac{360}{9} \times 10 = 400$$

$$A_{35} \text{ total employees} = 1320 - 400 = 920$$

$$A_{35} \text{ female employees} = \frac{920}{10} \times 7 = 644$$

**44) Answer: D**

**46) Answer: B**

Cities	Total	Male population	Female population
A	2700	1215	1485
B	3000	1650	1350
C	3300	2145	1155
D	3600	2520	1080
E	2400	1440	960

$$\text{Difference} = 1485 - 1080 = 405$$

**47) Answer: B**

$$\text{Number of literate population in B} = \frac{3}{5} \times 3000 = 1800$$

$$\text{Number of illiterate population in B} = \frac{2}{5} \times 3000 = 1200$$

$$\text{Number of male literate population} = \frac{3}{5} \times 1650 = 990$$

$$\text{Number of male illiterate population} = \frac{2}{5} \times 1650 = 660$$

$$\text{Number of female literate population} = 1800 - 990 = 810$$

$$\text{Number of female illiterate population} = 1200 - 660 = 540$$

$$\text{Difference} = 810 - 540 = 270$$

$$\text{Total number of employees below 35 years in E} = 40 \times \left(\frac{4+1}{1}\right) = 200$$

$$\text{Total number of employees above 35 years in E} = 75 \times \left(\frac{7+5}{5}\right) = 180$$

$$\text{So, the total number of employees in E} = 200 + 180 = 380$$

$$\text{Total number of employees in A} = \frac{380}{5} \times 100 \times \frac{30}{100} = 2280$$

**45) Answer: E**

$$\text{Total number of employees in D} = \frac{160 \times 100}{10} \times \frac{15}{100} = 240$$

$$\text{So, the number of employees above 35 years in D} = 240 - 96 = 144$$

$$\text{The number of female employees above 35 years in D} = \frac{144}{16} \times 9 = 81$$



## Pie Graph Based DI for Bank PO Prelims Exams

48) Answer: C

Required average =  $(1215 + 1650 + 2145 + 2520 + 1440)/5 = 1794$

49) Answer: A

Required percentage =  $[(1155 + 960)/3000] * 100 = 70.5\%$

50) Answer: E

Required ratio =  $1350:1215 = 10:9$

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